

# BALTIC SEAENVIRONMENT PROCEEDINGS

No. 60

## ACTIVITIES OF THE COMMISSION 1994

Report on the activities of the Baltic Marine  
Environment Protection Commission during 1994  
including the 16th Meeting of the Commission held  
in Helsinki, 14 - 17 March 1995

HELSINKI COMMISSION  
Baltic Marine Environment Protection Commission  
1995

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# REPORT ON THE ACTIVITIES OF THE HELSINKI COMMISSION DURING 1994

## 1. ACTIVITIES OF THE COMMISSION DURING 1994

The decisions taken by the HELCOM 15 meeting on the level of Ministers of the Environment have strongly influenced the activities of the Commission during 1994. This applies to nearly all fields of activities of the Commission. A comprehensive review of the HELCOM work has been carried out and reported to HELCOM 16 by an ad hoc Working Group to Review the Activities, Working Structure and Methods of the Commission (HELCOM REV) established by HELCOM 15.

In 1994, Latvia and the European Community acceded to the Convention on the Protection of the Marine Environment of the Baltic Sea Area 1974. The ten Contracting Parties are thus Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

As of 31 December 1994, the European Community, Germany, Latvia and Sweden have ratified the revised Convention, the 1992 Helsinki Convention.

### 1.1 Helsinki Commission (HELCOM)

The outcome of the 15th meeting of the Commission, held in Helsinki 8-11 March 1994, has been published in Baltic Sea Environment Proceedings No. 55.

Detailed information on the progress made since the 15th meeting of the Commission in different substantive activities within the framework of the Helsinki Commission is given in the subsequent paragraphs.

#### Ad hoc Working: Group to Review the Activities. Working Structure and Methods of the Commission (HELCOM REV)

HELCOM REV was established by HELCOM 15 to make a thorough analysis of the work of the Commission in order to concentrate the joint and national resources on high priority issues in a concerted and efficient way. The Group discussed priorities of the different HELCOM activities, the HELCOM organization, working methods of the Commission, as well as the working methods and organization of the Secretariat.

The Government of Finland provided the Commission with financial resources to enable the use of consultant services for reviewing the working methods of the Commission and, especially, those of the Secretariat.

HELCOM REV held three meetings in Helsinki, Finland, i.e.

- 7-8 June 1994
- 16-18 August 1994
- 16-18 November 1994.

The Meetings of HELCOM REV were, according to the decision by HELCOM 15, chaired by Mr. Peter Ehlers from Germany. Experts representing all the Contracting Parties, except the European Community, participated in the work.

The final report of HELCOM REV was submitted to HELCOM 16 for consideration.

#### Ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU)

Helcom 15 prolonged the mandate of HELCOM CHEMU with the aim to follow and implement the substantial recommendations provided in "The Report on Chemical Munitions Dumped in the Baltic Sea". HELCOM 15 requested also all the Contracting Parties to provide the Commission by 1995 with information and official documentation concerning chemical munitions dumped after 1947.

The Group held two meetings in Copenhagen, Denmark, on 16-17 June 1994 and on 22 September 1994. A meeting of a Drafting Group to elaborate the Final Report was arranged in Hamburg, Germany, on 14-15 December 1994. The Final Report will be submitted to HELCOM 16 for consideration at the end of January 1995.

### **1.2 Environment Committee (EC)**

The Environment Committee (EC) held its fifth meeting in **Nyköping**, Sweden, 10-14 October 1994. The Meeting was attended by Delegations from all the Contracting Parties except the European Community, Observers from the International Council for the Exploration of the Sea (ICES) and the United Nations Environment Programme (UNEP)- GRID-Arendal office, representatives of the Baltic Marine Biologists (BMB), the Conferences of Baltic Oceanographers (CBO), and the consultant of the Helsinki Commission on BMP and MORS environmental data, the Environment Data Centre of the National Board of Waters and the Environment in Finland (EDC). In accordance with the procedure decided by the Commission representatives from the World Wide Fund for Nature (WWF), the Coalition Clean Baltic (CCB) and the European Chlor-Alkali Industry (EURO-CHLOR) attended the Meeting. The Executive Secretary, the Technological Secretary, and the Chairman of the Technological Committee, also attended the Meeting.

Mr. Niels-Peter **Rühl** of Germany acted as Chairman of the Meeting and Mr. Eugeniusz Andrulowicz of Poland acted as Vice-Chairman of the Meeting. The Environment Secretary of the Commission, Ms. Eeva-Liisa Poutanen, acted as Secretary of the Meeting.

The Contracting Parties reported to the Meeting on their national and bilateral activities pertinent to the goals of EC. The Observers provided information on the recent activities in their organizations looking forward to close cooperation especially on issues related to mutual interest.

## Cooperation with other Committees

With regard to the work of other Committees and ad hoc working groups EC considered specific topics of common interest with the Technological Committee (TC), i.a., those related to airborne pollution issues, monitoring and assessment activities regarding the harmful substances, information and consultation with regard to the constructions likely to cause environmental effects.

The efficient deliberations during the Committee meeting were strongly facilitated by the advisory meeting of the Chairmen of EC and TC, and the Committee supported the continuation of this procedure.

The Committee considered the cooperation with the Maritime Committee (MC), i.a., related to request of information on airborne pollution from ship traffic and accidental introduction of exotic marine organisms via ballast water to the Baltic Sea.

Furthermore, the Committee commented the proposals of the meetings of the ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU) and considered the cooperation with the HELCOM Programme Implementation Task Force (HELCOM PITF) and the Combatting Committee (CC).

## Actions arising from the Ministerial Decisions at HELCOM 15

The Committee examined thoroughly the decisions by the Ministers at HELCOM 15 within the mandate of EC and agreed on actions, inter alia, related to the national programmes to reduce substantially the inputs of nutrients and identification of areas considered as non-sensitive to inputs of nitrogen, as well as possibilities to improve the monitoring and assessment work in order to identify the problem areas of the coastal zone with regard to persistent organic compounds. Furthermore, the Committee endorsed the proposals for joint action with regard to the elaboration of the Final Implementation Report to be presented to the Commission in 1998.

## Airborne pollution

The Committee considered the report of the eleventh meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EC EGAP) and endorsed, i.a., the proposals that the establishment of air emission inventories is a responsibility of TC POLO, that five persistent organic pollutants (hexachlorobenzene, dioxins, PCBs, PAH, hexachlorocyclohexane) that are emitted primarily to air should be included at this stage in the air monitoring programme of HELCOM and that the next report on airborne pollution will cover the years 1991-1995 and the basic structure of the report will be rather similar to that of the previous report published in 1991. The Committee also endorsed the revised Terms of Reference for EC EGAP as well as the revised Work Programme, taking into account the necessary amendments arising from the division of the responsibilities and work between EC EGAP and TC POLO.



### Monitoring of radioactive substances

The Committee considered the report of the ninth meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (EC MORS). The Committee accepted the draft Evaluation Report on the Radioactivity in the Baltic Sea 1984-1991 and agreed that when the final texts are edited and approved by the Conveners of the chapters the report can be printed in the Baltic Sea Environment Proceedings series. Regarding the Radionuclide Thermoelectric Generators (RTG) the Committee stressed that these types of nuclear power supply for lighthouses or other technical installations should generally not be used, and further information on positions, number, type and radioactive content of the remaining RTGs as well as on safety analyses would be highly welcomed.

### Baltic Monitoring Programme (BMP) and related activities

With regard to the improvement of the quality of the monitoring data the Committee was informed about the outcome of the meetings of the ad hoc Working Group on Chemical Quality Assurance and on Biological Quality Assurance as well as of two ICES/HELCOM Workshops, one on Quality Assurance of Benthic Measurements in the Baltic Sea and the other on Quality Assurance of Pelagic Biology Measurements in the Baltic Sea. The Committee endorsed several proposals, i.a., that all institutes reporting data to the BMP/Coastal Monitoring Programme (CMP) shall introduce in-house quality assurance procedures, that ICES/HELCOM Workshops be arranged in 1995 on Quality Assurance and Intercomparison of Pelagic Biological Measurements in the Baltic Sea and on Quality Assurance and Intercomparison of Benthos Measurement Methods in the Baltic Sea. Furthermore, the Committee agreed on a proposal for the quality assurance policy of the Helsinki Commission to serve as a basis for improvements of the quality of the results from ongoing monitoring activities. Since the QA-policy is relevant also for other activities of the Commission, e.g., pollution load compilations, it will be forwarded to HELCOM 16 for adoption.

The Committee considered the report of the Workshop on the Revision of the Baltic Monitoring Programme and Guidelines and endorsed a number of recommendations by the Workshop. At the next step the Contracting Parties shall work out by the end of 1994 detailed proposals for the monitoring of eutrophication and its effects in the different sub-regions of the open Baltic Sea, after which a small Coordination Group will work out a harmonized programme proposal. Also the advice by statistical analyses, possible gaps identified by the Third Periodic Assessment as well as advice and proposals by the ICES/HELCOM Steering Groups on QA and Sediment Baseline Study will be taken into account when revising the BMP.

Regarding monitoring activities of coastal waters, the Committee considered compiled information on national monitoring programmes and programmes for river water, and a number of recommendations were endorsed. The same timetable and procedure as proposed for the BMP will be applied for the development of the CMP to ensure the correct compilation.

The Committee also considered matters related to data submissions and data deliveries and strongly requested those countries which are not submitting data on obligatory contaminants to do so as soon as possible in order to ensure a proper preparation of the Third Periodic Assessment. The Committee welcomed the progress on the Basic Geographic Information of

the Baltic Drainage Basin (BGIS) project and endorsed the proposed project organization for the next phase, according to which a steering board will be established to guide and control the work. The project will be coordinated by UNEP/GRID-Arendal.

#### Assessment of the state of the sea

The Committee was informed about the progress made by the experts in preparing the Third Periodic Assessment of the State of the Baltic Sea, 1989-1993. Being aware of the problems related to data submissions by the Contracting Parties as well as consequential problems of the consultant in processing the data, the Committee endorsed the revised timetable according to which the final draft will be presented at the EC meeting in autumn 1996 after which it will be printed.

The Committee also proposed that the products prepared by the Commission, e.g. the assessments, should be made more attractive to the public by using coloured pictures, reader friendly layout, products of the Baltic GIS and other tools to improve the information quality of the publications.

#### Nature conservation and biodiversity

The Committee adopted the draft Guidelines for Designating Marine and Coastal Baltic Sea Protected Areas (BSPAs) and proposed Protection Categories as well as agreed to propose to HELCOM 16 a draft HELCOM Recommendation concerning preservation of natural coastal dynamics. Poland made, however, a reservation on the Recommendation.

The Committee also expressed its serious concern about the status of wild salmon stocks in the Baltic Sea and proposed that HELCOM should approach the International Baltic Sea Fishery Commission on this issue. Furthermore, the Working Group on Nature Conservation and Biodiversity (EC-Nature) was asked to develop a project with the aim to identify effective measures to eliminate risks for extinction of Baltic species starting with the problems facing the wild Baltic salmon.

#### Other activities in the field of EC

With regard to the delays last year in providing national reports on the implementation of HELCOM Recommendations as well as on the Ministerial Declaration 1988, the Committee considered thoroughly the issue at its fifth meeting. The Committee emphasized that the Declaration of 1988 should be seen as a commitment of great importance which has focused on the problems related to reduction of inputs of substances most harmful to marine ecosystems. Definitely, following the Declaration of 1988, certain measures have been implemented by the Contracting Parties towards the 50 % reduction goal, improvements from which are shown in qualitative assessment of the coastal waters. However, only the discharge data on nutrients are more or less complete to allow quantification of reduction achieved in discharges.

The Committee expressed a deep concern with insufficient or missing data on heavy metals and toxic or persistent organic compounds. The data situation with these groups of substances turned out to be worse than could be expected. A message from TC POLO 2 that some countries would not be in the position to measure in PLC-3 some heavy metals and AOX due to lack of necessary equipment, is discouraging. The Committee agreed to the opinion that

missing data could not be re-established. However, the Committee proposed that the Contracting Parties should be encouraged to find and present any available reference data from earlier years starting from 1985 if these data can be documented and information sources specified.

The Committee invited ICES to provide existing information on scientific basis for the determination of the “levels that are not harmful to man or nature” with regard to priority harmful substances to be used as a basis for assessment of achieved improvements and proposing further action required, and also invited the Technological Committee to consider this issue further and to propose to the Commission, as appropriate.

The Committee considered matters related to dredged spoils and noted that in spite of several attempts by the convener of the ad hoc Working Group on Dredged Spoils the information on national regulations and amounts dumped in 1992 was still incomplete. Upon request by the HELCOM REV Group the Committee requested the Contracting Parties to consider whether the HELCOM Guidelines for the Disposal of Dredged Spoils and the technical annex could be replaced by the Guidelines for the Management of Dredged Material adopted by the Oslo Commission in 1993. Compiled information on the views of the Contracting Parties will be submitted for consideration by HELCOM 16. Furthermore, the Committee agreed to dissolve the ad hoc Working Group on Dredged Spoils and appreciated the offer by Germany to act as Lead Country for this topic.

### 1.3 Technological Committee (TC)

The fifth meeting of the Technological Committee (TC) was held 31 October - 4 November 1994 in Copenhagen, Denmark. The meeting was attended by Delegations of all the Contracting Parties, except for the European Community, as well as by the observers from the International Council for the Exploration of the Sea (ICES) and the European Chlor-Alkali Industry (EURO CHLOR). The Executive Secretary and the Environment Secretary also participated in the meeting.

Mr. Tapani Kohonen from Finland acted as Chairman, Ms. Ulla-Britta Fallenius from Sweden and Mr. Ulrich Kremser from Germany as Vice-Chairmen and the Technological Secretary of the Commission, Mr. Vassili Rodionov, as Secretary of the meeting.

The Contracting Parties reported on their national activities pertinent to the mandate of TC.

#### Actions arising from the Ministerial Decisions at HELCOM 15

The Committee examined the Ministerial Decisions taken at HELCOM 15 (HELCOM 15/18, Paragraph 3.1) related to reduction of land-based pollution and agreed on concrete actions within the mandate of TC, inter alia, those requiring close cooperation between TC and EC.

In order to further facilitate concerted action against excessive inputs of nutrients into the marine environment, the Committee agreed on the procedure for unified assessment of the national programmes of measures to reduce nutrient discharges and emissions. The results have to be reported to HELCOM 17 via EC 6 and TC 6.

The Committee elaborated a Code of Conduct for measures for environmentally sound management and transport of hazardous wastes and proposed it to HELCOM 16 for adoption as an interim arrangement within the Commission, if not all the Contracting Parties have signed and ratified the Basel Convention by March 1995.

The Committee elaborated proposals for concerted work of all HELCOM Committees in preparation of the Final Report on Implementation of the 1988 Ministerial Declaration to be submitted to the Commission's meeting in 1998.

#### Cooperation with other Committees

The Committee examined proposals concerning deletion of "hot spots" under the Joint Comprehensive Environmental Action Programme (JCP), namely four Finnish and four Swedish pulp and paper mills, and recommended HELCOM PJTF to delete these mills from the "hot spot" list.

The Committee endorsed the on-going activities of its working groups to assist the HELCOM PITF and also proposed additional topics for cooperation between TC and HELCOM PITF, e.g., in relation to public awareness and with regard to planning of nitrogen removal at existing municipal treatment plants.

Specific topics of common interest with the Environment Committee were discussed, i.a., those related to sources of heavy metals and organohalogens in the marine environment, preparation of the Third Periodic Assessment and exchange of information on national activities with significant environmental impact.

The Committee also discussed the issues of mutual concern with the Maritime Committee, e.g., air pollution from ships, nutrient discharges from ferries and handling of ship-generated wastes ashore.

#### Pollution load compilation

The Committee considered the outcome of the second meeting of the ad hoc Expert Group on Pollution Load to the Baltic Sea (TC POLO) and agreed on necessary action towards further development of the on-going project dealing with periodic evaluation of polluting waterborne inputs from land-based sources, PLC-3 (i.a. quality assurance, estimation of anthropogenic contributions to riverine fluxes, data handling) as well as started a pilot project for preparation of air emission inventories. Both projects are regarded as important undertakings towards effective compliance monitoring and follow-up system within HELCOM.

Taking into account that for the purposes of the 50 % reduction reporting in 1996 it would be important to obtain at least rough estimates of national contributions to the load of border (international) rivers, the Committee proposed that in bilateral cooperation on the pollution control of border rivers the Contracting Parties concerned should apply methodological principles exercised in PLC projects.

### Reduction of pollution from point sources

The Committee considered the outcome of the fourth meeting of the Working Group on Reduction of Discharges and Emissions from Point Sources (TC POINT) and decided to forward to HELCOM 16 for adoption eight Draft HELCOM Recommendations for priority polluting sectors, such as chemical industry (heavy metals and halogenated organic compounds), metal surface treatment (heavy metals and halogenated organic compounds), pulp and paper industry (NO, and SO<sub>x</sub>), textile production and leather industry (heavy metals and nutrients), incineration of household waste (dust, heavy metals and dioxins), municipalities (nitrogen removal and stormwater systems).

The Committee also agreed on further work on draft HELCOM Recommendations for other priority sectors, i.a., hard coal cokeries, production of fertilizers, food industry, offshore activities and fish farming, to be examined in 1995.

The Committee still could not find an agreement on whether the plants, e.g., pulp and paper mills, located at inland waters should be regarded as relevant polluters to the Baltic Sea and fall under HELCOM Recommendations. Further considerations were postponed till the results of TC POLO's evaluation of the anthropogenic part of the riverine fluxes are available.

The Committee included to the priority list the sector "thermal power plants and combustion processes" identified as a major source of heavy metals and NO<sub>x</sub>. TC POINT in 1995 will consider how to proceed in this new sector, e.g., in cooperation with the ECE-LRTAP Protocols.

### Reduction of pollution from diffuse sources

The Committee considered the outcome of the fourth meeting of the Working Group on Reduction of Inputs from Diffuse Sources (TC DIFF) and decided to forward to HELCOM 16 for adoption two Draft HELCOM Recommendations for priority diffuse sources, such as agriculture (pesticide use) and products containing heavy metals (electric equipment and sources of light).

The Committee also agreed on further work on draft HELCOM Recommendations for agriculture (definition of balanced fertilization and Codes of Good Agricultural Practice, restriction of heavy metals in fertilizers and in sewage sludge used in agriculture) and other priority sources and products (i.a. forestry, traffic, household combustion, mercury-containing thermometers) to be examined in 1995-96.

The Committee considered the status of evaluation of potential candidates to the Baltic Sea Priority List of Harmful Substances and emphasized that this work should take fully into account the progress in similar work within the EU, OECD and the 4th North Sea Conference.

### Implementation reporting

The Committee considered the conclusions on implementation of HELCOM Recommendations drawn from the Lead Country Progress Reports (1993/94 reporting round) and decided that these conclusions have to be thoroughly assessed by TC working groups in 1995.

The Committee also acknowledged substantial data gaps in the Interim Implementation Report (HELCOM 15/4/1/Rev. 1) and proposed that the Contracting Parties should be encouraged to find and present to the Commission any available data from earlier years if these data can be documented.

The Committee proposed that the final reporting on implementation of the 1988 Ministerial Declaration should be handled as a project established directly under the Commission. A tentative description of the project was proposed in coordination with other HELCOM Committees.

The Committee agreed on the procedure for the 1996/97 obligatory reporting round as regards the implementation of HELCOM Recommendations in the field of TC.

#### Future activities within TC

Pending the decisions by HELCOM 16 on the proposals by HELCOM REV, the Committee decided that the Strategy and Action Plan of TC should be reconsidered 1995 taking also into account the proposals by the TC working groups.

The working groups of TC were requested to also discuss, as a separate item in the Agenda, the ideas and proposals on how to organize their work to be still more relevant, rational and efficient.

With reference to the proposal to introduce a project approach within HELCOM, the Committee emphasized that in each particular case when projects are established the financial and man-power resources should be considered.

#### 1.4 **Maritime Committee (MC)**

The Maritime Committee held its 20th meeting in Tallinn, Estonia from 27 to 30 September 1994. Delegations from all the Contracting Parties to the Helsinki Convention attended the Meeting. Mr. Peter Ehlers from Germany and Ms. Alicja Gwadera from Sweden acted as Chairman and Vice-Chairman of the Meeting, respectively, and Mr. Adam Kowalewski, Maritime Secretary of the Commission, acted as Secretary of the Meeting.

#### Reception facilities

The Committee was reported on the outcome of the first meeting of the ad hoc Working Group on Reception Facilities in Ports (MC REFAC). The Committee endorsed the outcome of MC REFAC 1 and encouraged the Contracting Parties to actively contribute to the work of the Group. The Committee stressed that PITF should be approached to include in the JCP the assistance for possible needs in the Contracting Parties regarding improvement of reception facilities in ports after the elaboration of the Baltic Strategy for Reception Facilities and the assessment of ways and methods of its implementation. This assessment should also cover handling of ship-generated wastes ashore.

It is also worth mentioning that the second meeting of MC REFAC was held in Helsinki from 29 November to 1 December 1994 and that the meeting elaborated a draft HELCOM Recommendation on Reception Facilities. The missions by the International Maritime

Organization (IMO) to examine the needs for investments for reception facilities were arranged to the Port of St. Petersburg, Russia, and to the ports of Estonia, Latvia and Lithuania in 1994. Similar missions will be organized in Poland and in the Port of Kaliningrad at the beginning of 1995.

#### Matters related to discharges from ships

The Committee discussed about matters related to transport of dangerous goods in packaged form and harmful substances in bulk and came to the conclusion that the Contracting Parties will cooperate at IMO with respect to making the application of the International Maritime Dangerous Goods (IMDG) Code and the “Code of Safe Practice for Cargo Stowage and Securing” mandatory, timely finalisation of the work on the Draft International Convention on liability and compensation in connection with the carriage of hazardous and noxious substances by sea (HNS) and amending the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) to cover additional training requirements for masters and ship’s officers engaged in transport of goods in packaged form, as well as introduction of mandatory shipping routes in the Baltic Sea Area for ships carrying dangerous cargoes.

The Committee considered the study on discharges of sewage and grey water from passenger ships in the Baltic Sea Area, submitted by a consultant. According to low estimate there are about 70 million ferry passengers per year in the Baltic Sea. Ferries produce about 432,000 m<sup>3</sup> of sewage per year, which is partly discharged to the sea and leads to an input of about 132 tonnes of nitrogen and 33 tonnes of phosphorus into the Baltic Sea in total. In comparison with the municipal sewage treatment plant of the city of Gothenburg with connection of about 550,000 people, passenger ferries discharge monthly 2.5 times more phosphorus and 1/3 of nitrogen. The study will be commented by national Port, Environmental and Maritime Authorities as well as by Shipowners’ Associations in the Contracting Parties in order to enable the Committee to consider taking relevant decisions on possible further restrictions of discharge of sewage.

The Committee discussed a proposal for a draft HELCOM Recommendation on the prohibition of discharges of garbage from fish-processing units and came to the conclusion that only operational discharges of fish remnants from fishing vessels could be addressed in a such a Recommendation. The Committee decided that it would be appropriate to finalize this issue at its next meeting.

#### Air pollution from ships

The Committee was informed about the outcome of the IMO Bulk Chemicals Sub-Committee with regard to SO<sub>x</sub> matters and requests by the Baltic Sea States concerning the recognition of the Baltic Sea as a “Special Area” under the new Annex to MARPOL 73/78 on prevention of air pollution from ships and SO<sub>x</sub> reduction. The Committee decided to reconvene of MC AIR for its sixth meeting with an aim to elaborate a new Baltic Sea States submission on these issues for consideration of the 37th session of the Marine Environment Protection Committee. The Committee requested HELCOM 16 to approach the Governments of the Contracting Parties to take a concerted political action towards IMO aiming at the final approval of the aforementioned requests.

### Control measures. investigation and prosecution of violations

The Committee approved for adoption by HELCOM 16 two draft HELCOM Recommendations concerning strengthening the cooperation in investigation of violations of anti-pollution regulations and on bringing evidence to court and concerning cooperation in investigating violations or suspected violations of the sewage discharge provisions of the Helsinki Convention.

### Other matters in the field of MC

The Committee, on the basis of information submitted by some of the Contracting Parties, discussed matters related to introduction into the sea of harmful marine organisms carried in ballast waters. The Committee noted the significance of the problem and encouraged the Contracting Parties to continue with scientific and technological studies and invited them to provide MC 21 with ideas and proposals for a Baltic Strategy on how to deal with these issues.

The Committee decided that the work related to the measures to abate harmful effects from pleasure craft activities could be carried out as a project under the auspices of MC.

The Committee decided to discuss at MC 21 the ways and methods for improving the reporting system on the implementation of HELCOM Recommendations in the maritime field in the light of the 1992 Helsinki Convention.

## **1.5 Combatting Committee (CC)**

The 18th meeting of the Combatting Committee was held in Helsinki, Finland, from 7 to 11 November 1994. Delegations from Denmark, Estonia, the European Commission, Finland, Germany, Latvia, Poland and Sweden participated in the meeting.

Mr. Olli Pakkala from Finland and Mr. Anders Bergwall from Sweden acted as Chairman and Vice-Chairman, respectively, and Mr. Adam Kowalewski, Maritime Secretary of the Commission, acted as Secretary of the Meeting.

### Revision of the Manual on Co-operation in Combatting Marine Pollution

The Committee decided on a new structure of Volumes I and II of the HELCOM Combatting Manual as well as on Lead Countries for different chapters and timetable for the elaboration of the revised Manual. The revised Manual is expected to be approved at the 17th meeting of the Commission. In general the Manual will be rearranged in order to have general information and operational instructions in two separate sets. Some chapters, e.g., the national information, will be harmonized with the combatting manuals of Bonn and Copenhagen Agreements. The Manual will be saved in a word processing format and distributed to the users in loose sheets and on diskettes.



### Combatting spillages of oil and other harmful substances

The Committee considered the results of the six-year reporting period of oil spillages observed during surveillance activities. The results show that strong concentrations of discharges are located along the Danish, German and Swedish coastlines. One of the basic reasons for this conclusion is that these countries carry out intensive surveillance flights over major shipping routes in their response zones with the use of remote sensing equipment.

Taking into account one of the decisions adopted by the Environment Ministers at HELCOM 15, the Committee elaborated proposals for actions to be taken within the HELCOM context regarding incidents involving solid harmful substances and sunken ships, which pose a threat to the marine environment. The proposed actions are aimed at elaboration of a relevant draft HELCOM Recommendation and joint initiatives of the Baltic Sea States towards IMO concerning amendments to the IMO instruments dealing with the rights of a coastal state to take response measures in case of such an incident and the financial liability of a shipowner to cover costs of these measures.

### Surveillance activities

The Committee was informed that two joint aerial surveillance flights and one CEPCO (Coordinated Extended Pollution Control Operation) flight were conducted in 1994. During these flights 12 oil spillages were observed. The Committee decided to continue with two joint and one CEPCO flights next year. Denmark will act as Lead Country on aerial surveillance in 1995-1996.

### Other activities in the field of CC

The Delegations of Finland and Germany informed the Committee on new multipurpose offshore/patrol vessels which have recently been put into operation in their respective countries. Thus, abilities for combatting chemical spillages in the Convention Area have been considerably improved in 1994.

The Committee considered the implementation of HELCOM Recommendation 14/10 concerning cooperation and assistance to Estonia, Latvia and Lithuania in the field of combatting marine pollution. The Committee was of the opinion that there is a need for substantial investments in Estonia, Latvia and Lithuania for building up their national abilities to combat pollution at sea. These investments include, inter alia, offshore combatting vessels, remote sensing equipment for aerial surveillance and high sea booms. The Committee noted the ongoing cooperation of the Contracting Parties in this field and encouraged them to continue with bilateral assistance programmes. The Committee requested HELCOM PITF to extend its co-ordination activities by including assistance to the three States in establishing their national abilities to respond to accidental pollution.

The Committee was informed on the results of the work on modelling and drift forecasting models of oil and other harmful substances and was of the opinion that the operational Baltic Sea Model System could be further developed for the operational use.

The Committee approved guidelines for the application of HELCOM Recommendation 12/6 concerning development and use of oil drift forecasting.

The Committee considered the evaluation report of the operational exercise on combatting oil in ice/cold conditions arranged by Finland in Oulu in March 1994. This exercise was designed as “state of art” event to present suitable methods and equipment to respond to oil spillages in the winter conditions. The exercise showed that capabilities for combatting major spillages under ice are still limited, and further research and development is necessary to improve responding to such pollution. The Committee decided to include “state of art” exercises in the HELCOM operational exercise programme.

#### 1.6 **HELCOM Programme Implementation Task Force (HELCOM PITF)**

In 1994 HELCOM PITF met twice, for its fourth meeting on 17-19 May in Nyköping, Sweden, and for its fifth meeting on 23-24 November in Tallinn, Estonia. Delegations from HELCOM Contracting Parties, other HELCOM PITF member countries, i.e. Belarus, Czech Republic and Norway, and the other HELCOM PITF members, i.e. the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Nordic Investment Bank (NIB), the Nordic Environment Finance Corporation (NEFCO), the World Bank, the International Baltic Sea Fishery Commission (IBFSC) and Observers of HELCOM, i.e. Coalition Clean Baltic (CCB), International Council of Local Environmental Initiatives (ICLEI), Standing Conference of Rectors, Presidents and Vice-Chancellors of the European Universities (CRE), World Wide Fund for Nature (WWF) and Union of Baltic Cities (UBC) participated in the Meetings.

Mr. Göte Svenson from Sweden acted as Chairman and Mr. Niels-J. Seeberg-Elverfeldt, the HELCOM Programme Coordinator, as Secretary to both Meetings.

HELCOM PITF 4 decided to recommend to HELCOM 16 to accept NEFCO formally as a member of HELCOM PITF. It stressed the importance of coordinating Environmental Action Programme for Central and Eastern Europe (EAP) and Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) implementation. The World Bank affiliate International Finance Corporation was invited to participate in PITF meetings. In order to facilitate transparency and updating of JCP implementation HELCOM PITF principally adopted a compilation on status of JCP implementation. It approved proposals of the Lead Parties Germany and Poland to arrange for expert meetings on agriculture and traffic respectively. In the Meeting invited guests gave presentations on private management of waste water treatment in the German city of Rostock (hot spot No. 121), the case of St. Petersburg (hot spots No. 18-22) and on the Matsalu Project (hot spot No. 32). The Meeting urged PITF members to assist implementation of the St. Petersburg projects.

HELCOM PITF 5 welcomed Norwegian financial support for participation of HELCOM PITF member countries in transition which are not Contracting Parties of the Helsinki Convention and receive, therefore, no travel support from HELCOM. The Meeting urged HELCOM PITF members which participate in the process of EAP implementation, be it in the Task Force or the Project Preparation Committee (PPC), to assure that the JCP is fully taken into account. Coordination and cooperation with other countries and organisations active in areas which overlap or even coincide with JCP elements was strongly encouraged. It acknowledged that future use of the OECD/CCET Register questionnaire as a format for hot spot reporting would serve as a good additional tool for resource mobilisation, yet that other sources of information may be needed in order to arrive at comprehensive reporting on hot spots. A suitable format

for future reporting shall be elaborated by an informal meeting of experts from the Lead Parties for point source pollution, Finland and Sweden, and other HELCOM PITF members.

HELCOM PITF 5 approved removal of four “Pulp & Paper Mill-hot spots” in Finland and four in Sweden from the list of hot spots, it being the first decision of that kind.

Denmark presented a study on the 47 priority hot spots to the Meeting. The study concluded that there was a very significant reduction of the pollution load of BOD, and nitrogen in almost all river basins since 1991. It attributed the reduction, however, rather to a decline in industrial and agricultural activities than to remedial actions.

The Meeting considered the “Small Municipalities Project in Estonia” for building the requisite capacity for waste water treatment of 10 Estonian towns, co-financed by domestic resources, several donor countries and loans from EBRD and NEFCO, as a significant contribution to JCP implementation and as such a good example for similar projects in neighbouring countries.

HELCOM PITF 5 also decided to accept Finland as Lead Party for the implementation of JCP element 6 “Public Awareness and Environmental Education” since CCB which formerly took the lead had withdrawn from that position.

Regarding the results of the HELCOM ad hoc Working Group to review the activities, working structure and methods of the Commission the Meeting expressed strong concern that the present organizational structure of PITF including its name should remain in order to fulfil efficiently the tasks laid down in the HELCOM PITF Terms of Reference.

The Meeting reelected Mr. Göte Svenson as Chairman of HELCOM PITF for the second two year period.

#### Actions arising from the Ministerial Decisions at HELCOM 15

HELCOM PITF members and observers, also mindful of these Ministerial Decisions, continued to be active on all levels to further the implementation of the JCP. Particularly PITF member countries in transition generally made provisos in their budgets for environmental expenditures. Additionally, HELCOM PITF coordinates its activities to further JCP implementation with other countries and organizations as well as with the larger Environmental Action Programme for Central and Eastern Europe (EAP), both in an attempt to make optimal use of existing resources and to avoid duplication. Establishment of an adequate legal framework progresses in the environmental area, with respect to private laws on companies, property, banking etc., however, still somewhat slow. Establishment of an appropriate institutional infrastructure for the administration of environmental protection and enforcement of relevant laws is forthcoming, requires, however, a lot of external assistance, particularly with respect to development of human resources.

## 2. ADMINISTRATION OF THE COMMISSION 1994

Mr. Fleming Otzen and Mr. Tonny Niilonen from Denmark were, respectively, the Chairman and Vice-Chairman of the Commission until 30 June 1994. As from 1 July 1994, Mr. Harald-Adam Velner and Mr. Ain Lääne from Estonia were Chairman and Vice-Chairman, respectively.

Mr. Ulf Ehlin acted as Executive Secretary, Ms. Eeva-Liisa Poutanen as Environment Secretary, Mr. Adam Kowalewski as Maritime Secretary, Mr. Vassili Rodionov as Technological Secretary and Mr. Niels-J. Seeberg-Elverfeldt as Programme Coordinator of the Commission. The other members of the staff of the Commission were Ms. Ritva Kostakow-Kämpe, Administrative Officer, Ms. Teija-Liisa Lehtinen, Environment Assistant, Ms. Leena Heikkilä, Maritime Assistant, Ms. Satu Tofferi, Technological Assistant, Ms. Riitta Harjunkoski, Programme Coordination Assistant, Mr. Håkan Blomberg and Mr. Stefan Sacklén, Administrative Assistants, as well as Ms. Salme Mikkeli who has been employed as a part-time Assistant in the Secretariat.

As from April 1994, the staff of the Secretariat was joined by a half-time professional staff member, Ms. Maria Kausto, financially supported by the Barbara Gauntlett Foundation, USA. Ms. Kausto has contributed to the Secretariat's work within the framework of HELCOM PITF.

According to the Convention, the contributions by the Contracting Parties to the budget of the Commission are based on equal shares of the Contracting Parties. In addition, the Government of Finland has paid an extra contribution to cover the rent of the office, communication and equipment expenses and a part of the salaries of the office staff. According to an agreement made at an extraordinary HELCOM meeting in Gdansk, Poland on 23 March 1993, a special arrangement on sharing the costs is in force for a transition period of three years starting from 1 July 1993. The agreement states that Denmark, Finland, Germany, Poland and Sweden pay 16.7 %, Russia 12.5 % and Estonia and Lithuania together the remaining 4 % of the costs after deduction of the extra contribution by Finland and possible contribution by the European Commission if the European Community accedes to the Convention.

A special decision was also taken by HELCOM 15 saying that Latvia, if acceding to the Convention, shall pay the same amount as Estonia and Lithuania.

The distribution of expenses of the Commission during the fiscal year from 1 July 1993 to 30 June 1994 was as follows:

Meetings	1 430 000
Salaries	3 400 000
Travels	194 000
Consultant services	716 000
Publications	47 000
Support for countries in transition	<b>295 000</b>
Other administration	<u>1 673 000</u>
Total	FIM 7 755 000
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In addition, the Commission received an equivalent of FIM 685 000 from the Nordic Council of Ministers for various projects deriving from 1992/93 and an equivalent of FIM 191 000 from the Barbara Gauntlett Foundation for hiring an additional staff member for the PITF purposes.

The Executive Secretary was Secretary General of the 15th meeting of the Commission and conducted the work of the Secretariat. He also made the necessary preparations and acted as Secretary General of the following meetings:

- the Third Meeting of the Working Group to Prepare the 1994 Ministerial Meeting (1994 PREP), Hamburg, Germany, 24-25 January 1994;
- the Fourth Meeting of the Working Group to Prepare the 1994 Ministerial Meeting (1994 PREP), Helsinki, Finland, 14-15 February 1994;
- the Fifth Meeting of the Working Group to Prepare the 1994 Ministerial Meeting (1994 PREP), Helsinki, Finland, 7 March 1994;
- the 19th Meeting of the Chairmen and the Secretariat of the Helsinki Commission (CASH), Helsinki, Finland, 6 June 1994;
- the First Meeting of the ad hoc Working Group to Review the Activities, Working Structure and Methods of the Commission (HELCOM REV), Helsinki, Finland, 7-8 June 1994;
- the Second Meeting of the ad hoc Working Group to Review the Activities, Working Structure and Methods of the Commission (HELCOM REV), Helsinki, Finland, 16-18 August 1994;
- the 20th Meeting of the Chairmen and the Secretariat of the Helsinki Commission (CASH), Helsinki, Finland, 15 November 1994;
- the Third Meeting of the ad hoc Working Group to Review the Activities, Working Structure and Methods of the Commission (HELCOM REV), Helsinki, Finland, 16-18 November 1994.

These meetings were also attended by the Environment, Technological and Maritime Secretaries as well as by the Programme Coordinator and the Administrative Officer.

Furthermore, the Executive Secretary participated in the following meetings under the auspices of the Helsinki Commission or paid the following visits:

- visited the Minister of the Environment of Finland, Ms. Sir-pa Pietikainen, to discuss the preparations for the 1994 Ministerial Meeting, Helsinki, Finland, 4 February 1994;
- visited, together with the Programme Coordinator, the Minister of the Environment of Estonia, Mr. Andres Tarrand, to discuss matters related to the PITF work, Tallinn, Estonia, 6 April 1994;
- visited Mr. Timo Mäkelä, EBRD, to discuss matters related to PITF, London, United Kingdom, 25 April 1994;
- the Fourth Meeting of HELCOM PITF, Nyköping, Sweden, 17-19 May 1994;
- the 20th Meeting of the Maritime Committee (MC) in Tallinn, Estonia, 27-30 September 1994;
- the Fifth Meeting of the Environment Committee (EC), Nyköping, Sweden, 10-14 October 1994;
- visited Stockholm Water Ltd to get information concerning their activities to support municipalities in countries in economic transition, Stockholm, Sweden, 13 October 1994 (in conjunction with EC 5);
- the Fifth Meeting of the Technological Committee (TC), Copenhagen, Denmark, 31 October - 4 November 1994;

- the 18th Meeting of the Combatting Committee (CC), Helsinki, Finland, 7-11 November 1994;
- the Fifth Meeting of HELCOM PITF, Tallinn, Estonia, 23-24 November 1994;
- visited the new Minister of the Environment of Estonia, Mr. Vootele Hansen, to discuss HELCOM activities, Tallinn, Estonia, 22 November 1994 (in conjunction with PITF 5).

The Environment Secretary made the necessary preparations and acted as Secretary General of the following meetings:

- the Workshop for the Preparation of the Joint Evaluation Report on the Radioactivity in the Baltic Sea 1984-1991, Hamburg, Germany, 21-25 March 1994;
- the Second Meeting of the Steering Group for the Coordination of the Third Periodic Assessment (EC BETA), Helsinki, Finland, 11-14 April 1994;
- the meeting of the Chairmen of EC, Hamburg, Germany, 26-27 April 1994;
- the Workshop on the Revision of the Baltic Monitoring Programme (BMP) and Guidelines, Copenhagen, Denmark, 2-6 May 1994;
- the First Meeting of the ad hoc Working Group on Coastal Monitoring, Riga, Latvia, 18-19 May 1994;
- the Ninth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (EC MORS), Helsinki, Finland, 30 May - 3 June 1994;
- the Eleventh Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EC EGAP), Berlin, Germany, 12-16 September 1994 and the Joint Meeting of EC EGAP and TC POLO, Berlin, Germany, 13 September 1994;
- the Fifth Meeting of the Environment Committee (EC), Nyköping, Sweden, 10-14 October 1994.

Furthermore, the Environment Secretary participated in the following meetings under the auspices of the Helsinki Commission:

- the Third Meeting of the ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU), Copenhagen, Denmark, 19-21 January 1994;
- the Meeting of Technical Experts of the Basic Geographic Information of the Baltic Drainage Basin (BGIS) Project, Helsinki, Finland, 13 June 1994;
- the Fourth Meeting of the Working Group on Nature Conservation (EC-Nature), Tvärminne, Finland, 20-22 June 1994;
- the Fifth Meeting of the Technological Committee (TC), Copenhagen, Denmark, 31 October - 4 November 1994;
- the 18th Meeting of the Combatting Committee (CC), Helsinki, Finland, 7-11 November 1994.

The Environment Secretary has also carried out tasks related to the implementation and follow-up of decisions concerning matters in the environmental field.

The Technological Secretary made the necessary preparations and acted as Secretary General of the following meetings:

- the Fourth Meeting of the Working Group on Reduction of Inputs from Diffuse Sources (TC DIFF), Restock-Warnemiinde, Germany, 17-22 April 1994;
- the meeting of the Chairmen of TC, Hamburg, Germany, 26-27 April 1994;
- the Fourth Meeting of the Working Group on Reduction of Discharges and Emissions from Point Sources (TC POINT), Sopot, Poland, 9-13 May 1994;
- the Second Meeting of the ad hoc Expert Group on Pollution Load to the Baltic Sea (TC POLO), Berlin, Germany, 12-16 September 1994;

- the Fifth Meeting of the Technological Committee (TC), Copenhagen, Denmark, 31 October - 4 November 1994.

Furthermore, the Technological Secretary participated in the following meetings under the auspices of the Helsinki Commission:

- the Fourth Meeting of the HELCOM Programme Implementation Task Force (HELCOM PITF), Nyköping, Sweden, 17-19 May 1994;
- the Fifth Meeting of the Environment Committee (EC), Nyköping, Sweden, 10-14 October 1994;
- the 18th Meeting of the Combatting Committee (CC), Helsinki, Finland, 7-11 November 1994;
- a coordinating meeting in the Central Federal Inspection for Analytical Control (Moscow) for the experts from St. Petersburg, Kaliningrad and Belarus concerning the procedure of PLC-3 and Quality Assurance, Moscow, Russia, 5-7 December 1994;
- a coordinating meeting of the Lead Countries to discuss the support through PHARE- and TACIS-projects to PLC, Berlin, Germany, 15-16 December 1994.

The Technological Secretary has also carried out tasks related to the implementation and follow-up of decisions concerning matters in the technological field.

The Maritime Secretary made the necessary preparations and acted as Secretary General in the following meetings:

- the First Meeting of the ad hoc Working Group on Reception Facilities (MC REFAC), Helsinki, Finland, 17-19 May 1994;
- the Fourth Meeting of the ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU), Copenhagen, Denmark, 16-17 June 1994;
- the Fifth Meeting of the ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU), Copenhagen, Denmark, 22 September 1994;
- the 20th Meeting of the Maritime Committee (MC), Tallinn, Estonia, 27-30 September 1994;
- the eleventh meeting of the Baltic Maritime Co-ordinating Meeting (BMCM) held in conjunction with MEPC 36, London, United Kingdom, 30 October 1994;
- the 18th Meeting of the Combatting Committee (CC), Helsinki, Finland, 7-11 November 1994;
- the Second Meeting of the ad hoc Working Group on Reception Facilities (MC REFAC), Helsinki, Finland, from 29 November to 1 December 1994;
- the meeting of HELCOM CHEMU Drafting Group, Hamburg, Germany, 14-15 December 1994;
- the Sixth Meeting of the ad hoc Working Group on Air Pollution from Ships (MC AIR), Helsinki, Finland, 24-25 January 1995.

The Maritime Secretary also acted as Secretary of the following meetings:

- Informal Expert Meeting on Strengthening the Cooperation in Investigation of Violations of Anti-Pollution Regulations and on Bringing Evidence to Court, Hamburg, Germany, 13-15 June 1995;
- the First Meeting of the Informal Working Group on Revision of the HELCOM Combatting Manual (CC MANUREV), Karlskrona, Sweden, 3-4 August 1994.

The Maritime Secretary has also carried out the tasks related to the implementation and follow-up of the decisions concerning the maritime and combatting fields.

The Programme Coordinator made the necessary preparations and acted as Secretary General of the following meetings:

- the Fourth Meeting of HELCOM PITF, Nyköping, Sweden, 17-19 May 1994;
- the Fifth Meeting of HELCOM PITF, Tallinn, Estonia, 23-24 November 1994.

The Programme Coordinator participated in the following meetings under the auspices of the Helsinki Commission:

- the ad hoc Working Group on the Use of Economic Instruments, Stockholm, Sweden, 31 January - 1 February 1994;
- the First HELCOM PITF PA & EE Meeting, Gdansk, Poland, 12-13 April 1994;
- the Fourth Meeting of the Working Group on Reduction of Inputs from Diffuse Sources, Rostock-Warnemünde, Germany, 18-20 April 1994;
- the Fourth Meeting of the Working Group on Reduction of Discharges and Emissions from Point Sources, Sopot, Poland, 9-10 May 1994;
- Second HELCOM PITF PA & EE meeting, Riga, Latvia, 21-22 September 1994;
- Third HELCOM PITF PA & EE meeting, Helsinki, Finland, 7-8 November 1994.

Furthermore, the Programme Coordinator participated in the following meetings in order to promote and coordinate JCP implementation, partly through hot spot visits and presentations on the JCP:

- PHARE-Seminar, Riga, Latvia 24-25 January 1994;
- visiting Latvian hot spots (No. 46. Daugavpils, No. 42. the Riga Wastewater Treatment Plant), Latvia, 26-27 January 1994;
- meeting of UBC Environment Committee (more cost effective methods for establishment and construction of wastewater treatment systems), Turku, Finland, 8 April 1994;
- meeting Polish Ministry of Environment, Warsaw, Poland, 10-13 April 1994;
- meeting with Hamburg Chamber of Commerce on promotion of private sector participation in JCP implementation, Hamburg, Germany, 21 April 1994;
- meeting with European Environmental Unit of McKinsey & Company Inc. on promotion of private sector participation in JCP implementation, Hamburg, Germany, 21 April 1994;
- meeting with Max-Planck-Institute for Private International and Foreign Private Law on contribution to implement JCP element 1, Hamburg, Germany, 21 April 1994;
- meeting at Umweltbundesamt (UBA) with HELCOM related staff, Berlin, Germany, 25 April 1994;
- meeting with decision-makers, visit of hot spots (No. 59 Vilnius WTP, Grigiskės Paper Factory, No. 51 Kaunas WIP, No. 55 Panevezys WTP, No. 41 Siaulai WTP, No. 63 Klaipeda WTP, No. 64 Klaipeda Cardboard Factory, No. 66 Kursiu Lagoon) as well as presentation of the JCP, Vilnius and others, Lithuania, 15-19 June 1994;
- meeting with EAP Task Force (coordination and cooperation between EAP- and JCP implementation), Paris, France, 1 July 1994;
- meeting with French Ministry of Environment on cooperation and coordination with French assistance in the environmental sector for Eastern European countries, Paris, France, 1 July 1994;
- Pre-appraisal mission of the World Bank, Haapsalu/Matsalu/Tallinn, Estonia, 14-20 September 1994;
- visits of hot spots (No. 38 Sloka and No. 43 VEF plant), Riga, Latvia, 20 September 1994
- Environmental Aid Co-ordination Meeting for Lithuania, Vilnius, Lithuania, 24-26 October 1994;



- Second International Partnership Exchange meeting - IPEX- 2 - of International Network of Environmental Management (INEM) (presentation about information on and linkages to JCP implementation), Bonn, Germany, 9 November 1994;
- presentation on “The Role of Private Industry in Implementing the JCP” before Hamburg Chamber of Commerce, Hamburg, Germany, 10 November 1994.

#### Publications and data

In accordance with the decision by the Commission, the following volumes of the Baltic Sea Environment Proceedings have been published:

No. 55 Activities of the Commission 1993; Including the 15th meeting of the Commission held in Helsinki 8- 11 March 1994

No. 56 Intergovernmental Activities in the Framework of the Helsinki Convention 1974-1994

No. 57 Guidelines for the Third Pollution Load Compilation (PLC-3)

No. 58 ICES/HELCOM Workshop on Quality Assurance of Chemical Analytical Procedures for the Baltic Monitoring Programme, Hamburg, Germany, 5-8 October 1993

No. 59 HELCOM Seminar for Experts from Estonia, Latvia, Lithuania and Russia on the Implementation of HELCOM Arrangements, Other International Instruments and Related Matters, Riga, Latvia, 30 August - 3 September 1993.

Furthermore, in accordance with the decision by the Commission, a booklet “20 Years of International Cooperation for the Baltic Marine Environment 1974-1994” was published to commemorate twenty years of international cooperation since signing of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) on 22 March 1974.

A newsletter “HELCOM NEWS” containing information on HELCOM activities has been produced six times and submitted to the Contracting Parties, institutions and persons involved in the HELCOM work as well as to cooperating organizations.

The existing Baltic Monitoring Programme data for 1989-1993 have been compiled by the consultant (Environment Data Centre of the National Board of Waters and the Environment in Finland, EDC) and was submitted to the Contracting Parties in October-November 1994. The graphical presentations of the 1992 BMP data from selected stations, according to the agreement between the Commission and the consultant, were submitted to the fifth meeting of EC by EDC. For the assessment work the BMP data on harmful substances is under validation by ICES.

Several data sets have been delivered to various scientists and institutes following the rules of publicity of the BMP data.

Regarding the development of the Basic Geographic Information of the Baltic Drainage Basin (BGIS) the feasibility study, financially supported by the Nordic Council of Ministers, has been finalized and the main project is planned to start in January 1995 depending, however, on financing. Also in the future steps of the project extensive collaboration between different

institutions will be needed. Within the feasibility study the potential users and their requirements, various themes that are considered important to be included in the Baltic Drainage Basin wide database, and their descriptions as well as technical specifications were identified. Also the organization of the BGIS project, inter alia, steering, coordination, realization, funding and links to other major Baltic region project initiatives and/or organizations of the actual project period were considered to some extent.

Furthermore, most of the 1992 and part of 1993 data on airborne pollution have been submitted by the Contracting Parties to the consultant of the Commission, ECE/EMEP Centre NILU in Norway. Data concerning radioactive substances, both environmental and release data, have been compiled by the consultants, EDC and the Finnish Centre for Radiation and Nuclear Safety, STUK, and were submitted together with graphical presentations to the ninth meeting of EC MORS.

#### Cooperation with other international organizations

HELCOM 15 granted observer status to the International Environmental Agency for Local Governments, ICLEI, the European Chlor-Alkali Industry, EURO CHLOR, the Union of the Baltic Cities, UBC, the Standing Conference of Rectors, Presidents and Vice-Chancellors of the European Universities, CRE, and the European Union for Coastal Conservation, EUCC, for a time period of two years.

The international organizations being observers of the Commission during 1994 have, therefore, been the following:

- Intergovernmental Oceanographic Commission (IOC)
- International Atomic Energy Agency (IAEA)
- International Baltic Sea Fishery Commission (IBSFC)
- International Council for the Exploration of the Sea (ICES)
- International Maritime Organization (IMO)
- Oslo and Paris Commission (OSCOM/PARCOM)
- United Nations Economic Commission for Europe (ECE)
- United Nations Environment Programme (UNEP)
- World Health Organization, Regional Office for Europe (WHO/EURO)
- World Meteorological Organization (WMO)
  
- Coalition Clean Baltic (CCB)
- European Chlor-Alkali Industry (EURO CHLOR)
- European Union for Coastal Conservation( EUCC)
- International Environmental Agency for Local Governments (ICLEI)
- Standing Conference of Rectors, Presidents and Vice-Chancellors of the European Universities (CRE)
- Stichting Greenpeace Council, Greenpeace International
- Union of the Baltic Cities (UBC)
- World Wide Fund for Nature, WWF International.

The Commission was represented at different international meetings by

- Ms. Kaisa Kononen of Finland at the 19th Meeting of the Joint Monitoring Group (JMG) of the Oslo and Paris Commissions, Dublin, Ireland, 24-28 January 1994;
- Mr. Jürgen Herrmann of Germany at the Second Meeting of the Working Group on Radioactive Discharges (RADD) of the Paris Commission, Luxembourg, 23-25 February 1994;
- Ms. Alicja Gwadera from Sweden at the 35th Session of the Marine Environment Protection Committee of IMO, London, United Kingdom, 8-11 March 1994;
- Mr. Sverker Evans of Sweden at the Meeting of the Ministers of Fishery and the seminar "Surveillance and Monitoring", Visby, Sweden, 24-25 May 1994;
- Mr. Marek Baranowski from UNEP/GRID-Warsaw at the expert seminar on the possibilities on exchange of spatial data for physical planning and natural resources management in the Baltic Region, Gävle, Sweden, 3-7 September 1994;
- Ms. Vappu Tervo of Finland at the 82nd Statutory Meeting of the International Council for the Exploration of the Sea (ICES), St. John's, Canada, 22-30 September 1994;
- Mr. Sverker Evans of Sweden at the Second Meeting of the Environmental Assessment and Monitoring Committee (ASMO) of the Oslo and Paris Commissions, Ostend, Belgium, 6-9 December 1994;
- Mr. Tapani Kohonen at the Third Meeting of the Environment for Europe Task Force, Paris, France, 15-16 December 1994.

The Chairman of the Commission represented the Commission at the following meetings:

- Second Conference on Baltic Sea States Subregional Cooperation, Lübeck-Travemünde, Germany, 17- 19 October 1994;
- Third Ministerial Conference on "Vision and Strategies around the Baltic Sea 2010", Tallinn, Estonia, 7-8 December 1994.

The Executive Secretary represented the Commission at the following international meetings:

- the Gulf of Bothnia Environment Symposium, Umeå, Sweden, 19-21 March 1994;
- the Third Parliamentary Conference on Co-operation in the Baltic Sea Area, Warsaw, Poland, 5-6 May 1994;
- the Conference on Oil Terminals, Shipping and Offshore Activities in the Eastern Baltic: Present Situation, Future Prospects, Economic and Technological Appraisal and Environmental Risk, Loohusalu, Estonia, 12 May 1994;
- the Third Ministerial Session of the Council of the Baltic Sea States, Tallinn, Estonia, 24- 25 May 1994;
- the Workshop on a System of Meteorological and Oceanographical Buoys in the Baltic Sea, Norrköping, Sweden, 1 June 1994;
- the Second European Conference on Environment and Health, Helsinki, Finland, 20-22 June 1994;
- the WMO Workshop on assessing the aquatic environment, Stockholm Sweden, 8-12 August, 1994;
- the Conference on Security and Cooperation in Europe, Economic Forum on Business and Environment, Tallinn, Estonia, 7-9 September 1994;
- in the 20th Session of IBSFC, Gdynia, Poland, 13 September 1994;
- the Meeting of the Senior Officials of the Council of the Baltic Sea States, Szczecin, Poland, 4 November 1994;
- the Meeting of the International Policy Advisory Group for the ECO-BALTIC Conference, Wedel, Germany, 9 December 1994.

The Executive Secretary also paid the following visits to representatives of other international organizations:

- IMO and IOPC to discuss matters of joint interest for these organizations and HELCOM, London, United Kingdom, 26 April 1994;
- an informal meeting at the Secretariat of the Oslo and Paris Commissions concerning UNEP's Meeting of Experts on Control of Marine Pollution from Land-based Sources, London, United Kingdom, 27 April 1994;
- the Swedish Focal Point for Vision and Strategies Around the Baltic Sea 2010, Stockholm, Sweden, 16 May 1994 (on the way to PITF 4);
- Mr. Lars Björkbom, Swedish EPA, as representative of ECE to discuss relations between ECE and HELCOM concerning reduction of emissions of heavy metals and POPs, Stockholm, Sweden, 13 October 1994 (in conjunction with EC 5);
- together with the Environment Secretary, the Secretary General of ICES, Mr. Chris Hopkins, to discuss the cooperation between ICES and HELCOM, Copenhagen, Denmark, 2 November 1994 (in conjunction with TC 5);
- together with the Environment Secretary, the Secretary General of the Nordic Council of Ministers, Mr. Per Stenbäck, to discuss the cooperation between the Nordic Council of Ministers and HELCOM, Copenhagen, Denmark, 3 November 1994 (in conjunction with TC 5);
- together with the Environment Secretary, the Executive Director of EEA, Mr. Domingo Jimenez-Beltran, to establish contacts and to discuss future cooperation, Copenhagen, Denmark, 2 December 1994.

The Environment Secretary represented the Commission at

- the Conference of the European Commission "Towards a European Model of Sustainable Development", Brussels, Belgium, 24-25 November 1994.

The Maritime Secretary represented the Commission at

- the 36th Session of the Marine Environment Protection Committee (MEPC) of IMO in London, United Kingdom, 31 October - 4 November 1994.

The Programme Coordinator represented the Commission at

- the 5th Hansa Business Days 1994, Kiel, Germany, 15-16 March 1994 (Presentation on Financing of and private sector participation in JCP implementation).

### **3. 16th MEETING OF THE COMMISSION, 14-17 MARCH 1995**

The Helsinki Commission held its 16th Meeting in Helsinki from 14 to 17 March 1995. The Meeting was attended by representatives of all the Contracting Parties, viz. Denmark, Estonia, European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden. Also the Governments of Belarus and Slovak Republic were represented at the Meeting as invited HELCOM PITF members. The Meeting was, furthermore, attended by observers from the following intergovernmental organizations: International Baltic Sea Fishery Commission (IBSF), International Council for the Exploration of the Sea (ICES), Oslo and Paris Commissions (OSCOM/PARCOM), as well as from the non-governmental international organizations Coalition Clean Baltic (CCB), EURO CHLOR and World Wide Fund for Nature (WWF). The Meeting was also attended by representatives of the international non-governmental organizations Baltic Ports Organization (BPO), BirdLife International and

European Fertilizer Manufacturers' Association (EFMA) as applicants for observership to HELCOM.

The Meeting was chaired by the Chairman of the Commission, Mr. Harald-Adam Velner. Mr. Ulf Ehlin, Executive Secretary of the Commission, acted as Secretary General of the meeting.

The Commission considered and decided upon matters within the environment, technological, maritime and legal fields related to the protection of the Baltic Sea as well as upon matters related to cooperation in combatting pollution on the sea and matters related to the work of the HELCOM Programme Implementation Task Force. The Commission especially followed up the implementation of the decisions taken on ministerial level during HELCOM 15 and established a project to prepare the Final Implementation Report on the Ministerial Declaration 1988. Furthermore, the Commission took a number of decisions based on proposals by the ad hoc Working Group to Review the Activities, Working Structure and Methods of the Commission concerning priorities of different HELCOM activities, the HELCOM organization, working methods of the Commission as well as the Secretariat.

#### HELCOM Recommendations adopted by the 16th meeting of the Commission

The Commission adopted one HELCOM Recommendation related to the field of the Environment Committee (EC), concerning:

- preservation of natural coastal dynamics (HELCOM Recommendation 16/3)

eight recommendations related to the field of the Technological Committee (TC), concerning:

- reduction of emissions into the atmosphere from the pulp and paper industry (HELCOM Recommendation 16/4)
- requirements for discharging of waste water from the chemical industry (HELCOM Recommendation 16/5)
- restriction of discharges and emissions from the metal surface treatment (HELCOM Recommendation 16/6)
- basic principles in waste water management in the leather industry (HELCOM Recommendation 16/7)
- limitation of emissions into atmosphere and discharges into water from incineration of household waste (HELCOM Recommendation 16/8)
- nitrogen removal at municipal sewage water treatment plants (HELCOM Recommendation 16/9)
- reduction of discharges and emissions from production of textiles (HELCOM Recommendation 16/10)
- measures to reduce pollution by pesticides from agriculture, forestry and horticulture (HELCOM Recommendation 16/11)

two recommendations related to the field of the Maritime Committee (MC), concerning:

- strengthening the cooperation in investigation of violations of anti-pollution regulations and on bringing evidence to court (HELCOM Recommendation 16/1)
- co-operation in investigating violations or suspected violations of the sewage discharge provisions of the Helsinki Convention (HELCOM Recommendation 16/2).

All recommendations adopted by the 16th meeting of the Commission are attached to this publication.

### Matters related to the Environment Committee (EC)

The substantive items from the report of the fifth meeting of the EC are described in detail under Chapter 1.2 of this publication.

With regard to nature conservation and biodiversity the Commission adopted HELCOM Recommendation 16/3 concerning preservation of natural coastal dynamics. Furthermore, the Commission adopted the Guidelines for Designating Marine and Coastal Baltic Sea Protected Areas (BSPA) and proposed Protection Categories. With these Guidelines the Commission aims at expanding the BSPA system by large areas in offshore waters and additional areas in coastal region of particularly high ecological value.

The Commission adopted the Quality Assurance Policy of the Helsinki Commission and, noting the good working relationship between ICES and HELCOM, decided to have joint ICES/HELCOM Steering Groups on Quality Assurance of Chemical Measurements in the Baltic Sea and on Quality Assurance of Biological Measurements in the Baltic Sea, both coordinated by ICES on behalf of HELCOM.

The Commission decided that in principle the OSCOM Guidelines for the Management of Dredged Material and its technical annex should be applied within the Baltic Sea Area, however, they should be modified for the Baltic Sea. The Lead Country, Germany, was requested to elaborate a proposal for consideration of EC 6.

### Matters related to the Technological Committee (TC)

The Commission considered the report of the fifth meeting of the Technological Committee (TC), the substantive items of which are described in detail under Chapter 1.3 of this publication.

The Commission adopted six new HELCOM Recommendations aiming at the restriction of pollution from industrial branches of serious environmental concern, i.a. chemical industry, metal surface treatment, production of textiles, leather industry, incinerators of household wastes, pulp and paper industry.

The Commission also adopted HELCOM Recommendation stipulating a high-grade removal of nitrogen at municipal sewage treatment plants located in the areas sensitive to nitrogen inputs. Extensive discussions with regard to the need, technology and economics of such measures preceded this important decision.

The Commission also adopted HELCOM Recommendation concerning BEP for use of pesticides in agriculture, horticulture and forestry.

The Commission did not adopt the Draft HELCOM Recommendation on reduction of mercury from light sources and electrical equipment and referred the proposal back to the Technological Committee for re-examination with regard to technical possibilities for limitation on mercury content in sources of light.

The Contracting Parties reported their national plans aimed at substantial reduction of nutrient inputs from all land-based sources. These national plans will be assessed thoroughly during

1995 in order to enable the next HELCOM meeting to set up more precise targets against eutrophication.

Being concerned with the environmental threat associated with handling of hazardous wastes, the Commission adopted a Code of Conduct of measures for safe management and transport of hazardous wastes which will be operational within HELCOM until the Basel Convention is in force in the entire Baltic Sea Region.

#### Matters related to the Maritime Committee (MC)

The substantive items from the report of 20th meeting of the Maritime Committee are described in detail under Chapter 1.4 of this publication.

The Commission adopted HELCOM Recommendation 16/1 concerning strengthening the cooperation in investigation of violations of anti-pollution regulations and on bringing evidence to court. It is expected that on the basis of this Recommendation the Baltic "Manual" specifying national legal requirements of the Contracting Parties for a conviction in cases of violations of anti-pollution regulations will be developed in the coming year.

Furthermore, the Commission adopted HELCOM Recommendation concerning cooperation in investigating violations or suspected violations of the sewage discharge provisions of the Helsinki Convention.

The Commission requested the Governments of the Contracting Parties to take political action towards IMO aiming at the final approval of the Baltic Sea States' requests concerning recognition of the Baltic Sea as a "special area" under the new Annex to MARPOL 73/78 on prevention of air pollution from ships and SO<sub>x</sub> reduction.

WWF will elaborate a proposal for a cross-sectoral project concerning the handling of oil in the Baltic Sea Area for consideration of relevant HELCOM Committees and subsequent decision of the next meeting of the Commission in 1996.

#### Matters related to the Combatting: Committee (CC)

The substantive items from the report of the 18th meeting of the Combatting Committee are described in detail under Chapter 1.5 of this publication.

The Commission allocated necessary funds for conducting the inventory on transportation pattern and risk estimation of oils carried in the Baltic Sea Area. Background information for the inventory will be collected by all the Baltic Sea States during the three months period, September - November 1995.

The Commission endorsed the proposal for action on how to deal with incidents involving solid harmful substances and with sunken ships posing a threat to the marine environment and requested the Maritime and the Combatting Committees to take relevant actions and decisions on the basis of the proposal. The proposal comprises the elaboration of measures to be taken in the Baltic Sea and joint initiatives of the Baltic Sea States within IMO.

The Commission was informed that:

- Finland and Germany have put into operation multipurpose offshore/patrol vessels and, therefore, abilities to combat chemical pollution in the Convention Area have considerably increased in 1994;
- Finland organized an operational HELCOM exercise on combatting oil under ice/cold conditions in Oulu, 16-17 March 1994. The exercise was designed as “state of art” and it showed that there are suitable means for collecting small spillages of oil under ice and that further research and development is necessary to improve the abilities to respond to such pollution;
- exploration and exploitation activities in the Polish Exclusive Economic Zone are continued and a new B 3-7 well is now ready, and it will be a subject to a geological test in the coming months.

The Commission was also informed on results of surveillance activities over the Baltic Sea Area in years 1988-1993 and requested the Combatting and Maritime Committees to further develop measures aimed at increasing the identification of offenders of anti-pollution regulations.

#### Matters related to the HELCOM Programme Implementation Task Force (HELCOM PITF)

The substantive items of matters related to HELCOM PITF are described in detail under Chapter 1.6 of this publication.

A Third Activity Inventory and an Annual Report 1994 were submitted to HELCOM 16.

HELCOM 16 endorsed the Annual Report 1994 and took note of the Third Activity Inventory. It decided to accept the Nordic Environment Finance Corporation (NEFCO) as member of HELCOM PITF acknowledging with appreciation its active participation in the preparatory as well as implementing process of the JCP. HELCOM 16 also requested the members of HELCOM PITF to make efforts to improve the exchange of information on planned and on-going activities as well as results achieved within the framework of the JCP.

#### Matters related to dumped chemical munitions

The ad hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU) has finalized its work and provided the Commission with the Final Report. In the Final Report the Contracting Parties confirmed that “The Report on Chemical Munitions Dumped in the Baltic Sea” submitted to HELCOM 15 contains all available information on dumping of chemical weapons and that there were no dumping activities by their respective countries after 1947. The Final Report contains also proposals for future actions with respect to dumped chemical munitions to be taken in the HELCOM context.

The Commission confirmed that according to the existing knowledge, dissolved warfare agents are not a wide-spread risk to the marine environment. Nevertheless, the Commission took several decisions on future activities on this issue, particularly concerning further investigations of chemical processes and ecological effects of warfare agents to the marine environment.



### Observers to the Commission

Observer status to the Commission was granted to the Government of Belarus. Furthermore, observer status was granted to the international non-governmental organizations Baltic Ports Organization (BPO), BirdLife International and European Fertilizer Manufacturers' Association (EFMA) for one year. The future cooperation with NGOs will be considered by HELCOM 17.

### Administrative matters

The Commission established a project concerning a possible new method of calculating contributions of the Contracting Parties to the HELCOM budget, application of the UN Staff Rules to the HELCOM staff as well as elaboration of a protocol on immunities and privileges of the Commission. Finland offered to take leadership in the Project Team.

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## HELCOM RECOMMENDATION 16/1

Adopted 14 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### STRENGTHENING THE COOPERATION IN INVESTIGATION OF VIOLATIONS OF ANTI-POLLUTION REGULATIONS AND ON BRINGING EVIDENCE TO COURT

THE COMMISSION,

RECALLING Regulation 2 of Annex IV of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention) concerning co-operation in investigating violations of the existing legislation on anti-pollution measures, which have occurred or are suspected to have occurred within the Baltic Sea Area by, inter alia, inspecting oil record books, cargo record books, log books and engine log books, and by taking oil samples for analytical identification purposes,

RECALLING ALSO Article 6 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) concerning co-operation in detection of violations and enforcement of that Convention,

RECOGNIZING the need for the further improvement of the co-operation in the investigation of violations of anti-pollution regulations and on the prosecution of these violations,

BEARING IN MIND the 1992 Paris Memorandum of Understanding on Port State Control,

NOTING the preparation of a manual on evidence to court called “Oil Pollution at Sea - Securing Evidence on Discharges from Ships” within the Bonn Agreement,

RECALLING the Ministerial Decision made at HELCOM 15 on seeking intensified co-operation in investigations regarding violations of anti-pollution regulations, in harmonization of bringing evidence to court and in providing assistance in conducting such investigations,

RECALLING ALSO HELCOM Recommendations 6/13 and 10/8 concerning co-operation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations,

RECALLING FURTHER HELCOM Recommendation 12/8 concerning airborne surveillance with remote sensing equipment in the Baltic Sea Area,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention should:

- a) ensure that necessary emphasis is put on controls under MARPOL 73/78, on the quality of controls of the ship's technical aspects, on the control of ships' documents, such as the oil and cargo record books and on prosecuting infringements of the duty to keep these books properly;
- b) strengthen the co-operation in investigations of violations by, inter alia, developing and establishing more practical ways of exchanging evidence between states, including the use of an electronic mailbox system;
- c) promote the use of the manual "oil Pollution at Sea - Securing Evidence on Discharges from Ships", developed within the Bonn Agreement, explaining the gathering of evidence in cases of violations of anti-pollution regulations,

RESOLVES to develop a manual specifying the requirements for a conviction in cases of violations of anti-pollution regulations in the various Contracting States including, inter alia, the substantive items listed in the Attachment to this Recommendation.

## **ATTACHMENT**

### HELCOM Recommendation 16/1

Tentative list of substantive items to be included, inter alia, in the manual specifying the requirements for a conviction in cases of violations of anti-pollution regulations in the various Contracting States:

1. General description of national regulations concerning the enforcement of MARPOL 73/78 and the Helsinki Convention (oil, chemicals in bulk, sewage, garbage) including maximum fines which can be imposed;
2. Person held responsible for the violation;
3. Findings accepted by the Flag State administration including the contents and the evidence provided by reports of the Port State administration (all practical evidence, findings and facts concerning a single case preliminarily gathered by the Port State administration);
4. Differences in the prosecution of offenses against discharge regulations and mere-breaches of obligations, like the duty to make complete and correct entries into the oil record book;
5. Differentiation between contraventions against the Penal Code and breaches of administrative regulations, court fines, fines imposed by the administration and administrative means;
6. Statutory period of limitation;
7. Requirements for the prosecution of contraventions by the ships under foreign flag
  - a) under the flag of the Contracting Parties to MARPOL 73/78 and/or the Helsinki Convention,
  - b) under the flag of Non-Contracting Parties.



## **HELCOM RECOMMENDATION 16/2\*)**

Adopted 14 March 1995,  
having regard to Article 13, paragraph b)  
of the Helsinki Convention

### **COOPERATION IN INVESTIGATING VIOLATIONS OR SUSPECTED VIOLATIONS OF THE SEWAGE DISCHARGE PROVISIONS OF THE HELSINKI CONVENTION**

#### **THE COMMISSION,**

**RECALLING** HELCOM Recommendation 6/13 concerning cooperation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations and HELCOM Recommendation 10/8 concerning cooperation in investigating violations or suspected violations of discharge and related regulations for ships and dumping regulations,

**RECALLING ALSO** HELCOM Recommendation 1/5 concerning the application by the Baltic Sea States of guidelines for type testing and approval of sewage treatment systems,

**RECALLING FURTHER** HELCOM Recommendation 1 1/8 concerning Amendments to Regulation 7 of Annex IV of the Helsinki Convention,

**BEARING IN MIND** that in accordance with HELCOM Recommendation 1 1/9 concerning National Regulations on the Discharge of Sewage in National Waters the Governments of the Contracting Parties to the Helsinki Convention should implement by way of appropriate national regulations the provisions of Paragraph C of Regulation 7 of Annex IV of the Helsinki Convention, relating to the discharge of sewage with respect to ships, irrespectively of nationality, sailing in their national waters,

**NOTING** that the Contracting Parties to the Helsinki Convention should ensure that investigation on compliance with the sewage discharge provisions of the Helsinki Convention on board ships flying their flags shall be aimed at assessing that

- a) the ship is equipped with a suitable sewage treatment plant or a comminuting and disinfecting system, or holding tanks and a standard discharge connection;

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\*) This Recommendation supplements HELCOM Recommendations 6/13 and 10/8.

- b) the ship is surveyed in accordance with Paragraph F, Regulation 7;
- c) the ship is provided with a Sewage Pollution Prevention Certificate in accordance with Paragraph G, Regulation 7,

**NOTING ALSO** that HELCOM Recommendations 6/13 and 10/8 do not contain detailed guidelines for cooperation in investigating violations of sewage discharge provisions,

**RECOMMENDS** that the Governments of the Contracting Parties to the Helsinki Convention when cooperating in investigating violations or suspected violations of the sewage discharge provisions of the Helsinki Convention use the reporting format contained in Attachment 1 to this Recommendation,

**RECOMMENDS ALSO** that the Governments of the Contracting Parties to the Helsinki Convention while awaiting entry into force of Annex IV of MARPOL 73/78 should report to a flag state not being a Contracting Party to the Helsinki Convention on violations or suspected violations of Paragraph C of Regulation 7 of Annex IV of the Helsinki Convention by a ship flying its flag and sailing in the national waters of the Contracting Parties. For this purpose the reporting format contained in Attachment 2 should be used.

**Format for ships flying the flag of a Contracting Party  
to the Helsinki Convention**

**Notification of an offence against**

the Convention on the Protection of the Marine Environment  
of the Baltic Sea Area (Helsinki Convention)

*- the Contravening Vessel -*

..... <b>Name</b>	..... Flag
..... Home Port	..... Call sign
..... Ship's type	..... GRT
..... Place and date of the ascertainment/ the inspection	

*- the Persons Accused -*

.....  
Surname, First name, place of birth, country, function on board

.....  
Surname, First name, place of birth, country, function on board

*- Offence -  
(tick appropriate box)*

- On \_\_\_\_\_, the MV/TMV " \_\_\_\_\_ " was ascertained as being the putative cause of a pollution of the sea by sewage at the position \_\_\_\_\_ ' N \_\_\_\_\_ ' E.
- On \_\_\_\_\_ in \_\_\_\_\_, the MV/TMV " \_\_\_\_\_ " was checked concerning her compliance with the International Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention).

**It was thereby discovered that:**

- the M/VITMV " \_\_\_\_\_ " was not fitted with the necessary
  - system to comminute and disinfect sewage in accordance with Regulation 7 C Para (1) a), Annex IV of the Helsinki Convention;
  - sewage holding tank in accordance with Regulation 7 C Para (1) a), Annex IV of the Helsinki Convention;
  - sewage treatment plant in accordance with Regulation 7 C Para (1) b), Annex IV of the Helsinki Convention;
- the sewage treatment plant has not been certified by the Administration;
- the test results of the plant were not laid down in a document on board and the discharge produced visible floating solids in and discolouration of the surrounding water;
- during the discharge operation, the M/V/TMV " \_\_\_\_\_ " was not en route/did not proceed with the minimum speed of 4 knots;
- during the discharge operation, the minimum distance of 4% nautical miles from the nearest land was not kept.

Should this suspicion prove to be verified, the said vessel's command has committed an infringement of Regulation 7 C Para (1), Annex IV of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) which has also been ratified by \_\_\_\_\_

**Brief report on the measures taken by \_\_\_\_\_ (the Reporting State's) authorities to date:**

Proceedings/Result:

- A fine has been imposed against \_\_\_\_\_ responsible for unauthorized discharges of sewage within waters under \_\_\_\_\_ (the Reporting State's) jurisdiction;
- The proceedings against the command of the vessel in question on suspicion of illegal discharges of sewage within waters \_\_\_\_\_ (the Reporting State's) jurisdiction have been terminated as
  - the perpetrator/s has/have no permanent residence in \_\_\_\_\_ (the Reporting State) and there is no access to him/them;
  - there is insufficient evidence to the degree required by law.
- The proceedings against the command of the vessel in question on suspicion of illegal discharges of sewage outside waters under \_\_\_\_\_ (the Reporting State's) jurisdiction have been terminated as \_\_\_\_\_ (the Reporting State's) authorities have no jurisdiction in this area.

Security deposit:

- The security deposit/s previously imposed was/were set aside (see page \_\_\_\_\_ of the file).
- The amount/s of the security deposit/s remaining in excess was/were refunded to the person/s concerned (see page \_\_\_\_\_ of the file).



**Measures expected to be taken by the Flag State:**

Prosecution of the illegal discharge of sewage by \_\_\_\_\_  
and information about the measures taken.

Remark:

The Helsinki Commission will receive notice of the facts ascertained.

Other remarks:

Enclosure: 1 file of the preliminary proceedings

**Format for ships flying the flag of Non-Contracting Parties  
to the Helsinki Convention**

Convention on the Protection of the Marine Environment  
of the Baltic Sea Area (Helsinki Convention)

\_\_\_\_\_ (Flag State), MV/TMV " \_\_\_\_\_ " -

- On \_\_\_\_\_, the MVITMV " \_\_\_\_\_ " was ascertained as being the putative cause of a pollution of the sea by sewage at the position \_\_\_\_\_, N \_\_\_\_\_, E.
- On \_\_\_\_\_ in \_\_\_\_\_ the MVITMV " \_\_\_\_\_ " was inspected by \_\_\_\_\_. In the course of this inspection it was discovered that:
  - the MVITMV " \_\_\_\_\_ " was not fitted with the necessary
    - system to comminute and disinfect sewage in accordance with Regulation 7 C Para (1) a), Annex IV of the Helsinki Convention;
    - sewage holding tank in accordance with Regulation 7 C Para (1) a), Annex IV of the Helsinki Convention;
    - sewage treatment plant in accordance with Regulation 7 C Para (1) b), Annex IV of the Helsinki Convention;
  - the sewage treatment plant has not been certified by the Administration;
  - the test results of the plant were not laid down in a document on board and the discharge produced visible floating solids in and discolouration of the surrounding water;
  - during the discharge operation, the MV/TMV " \_\_\_\_\_ " was not en route/did not proceed with the minimum speed of 4 knots;
  - during the discharge operation, the minimum distance of 4% nautical miles from the nearest land was not kept.

Should this suspicion prove to be verified, the said vessel's command has committed an infringement of Regulation 7 C Para (1), Annex IV of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention).

A prosecution by \_\_\_\_\_ (the Reporting State's) authorities will not take place as

- the perpetrator/s has/have no permanent residence in \_\_\_\_\_ (the Reporting State) and there is no access to him/them;
- there is insufficient evidence to the degree required by law;
- \_\_\_\_\_(the Reporting State's) authorities have no local jurisdiction.

Although it is acknowledged that \_\_\_\_\_ (the Flag State) is not a Contracting Party to the Convention on the Protection of the Marine Environment of the Baltic Sea Area, the above findings are brought to the attention of \_\_\_\_\_ (the Flag State's) authorities in the expectation that the Government of the \_\_\_\_\_ (Flag State) will not dissociate itself from the international efforts to prevent the pollution of the environment but will, instead, take appropriate steps towards achieving this objective.

The Helsinki Commission will be informed of the facts established.

I should be grateful for any information regarding action being taken in this case by the authorities of \_\_\_\_\_ (the Flag State).



## HELCOM RECOMMENDATION 16/3

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### PRESERVATION OF NATURAL COASTAL DYNAMICS

#### THE COMMISSION,

RECALLING Article 13 g of the Convention on the Protection of the Marine Environment of the Baltic Sea, 1974 Helsinki Convention,

NOTING Article 15 of the 1992 Helsinki Convention and the recommendation concerning the protection of the coastal strip (HELCOM 15/1), particularly: “that in this protected coastal strip, activities which would permanently change the nature and landscape, ” . . . “not be allowed, except when proved overwhelmingly in the public interest.. .”; “that a zone of at least 3 kilometres **landward** from the mean water line be established as a coastal planning zone.. .” ,

NOTING ALSO that conflicts exist between the goals of coastal defence<sup>1)</sup> and the goals of nature conservation and that coastal defence measures often lead to, e.g. :

- disturbances of natural ecosystem processes and biotope structures of beaches, dunes, cliffs and the near shore zone by partial or complete modification of local and regional morphodynamics,
- continuous loss of characteristic marine influenced ecosystems, such as episodic flooded coastal and riverine wetlands, coastal wet-forests or active cliffs,
- an increasing threat for the biodiversity of coastal areas,

RECOGNIZING that the typical flora and fauna of coastal areas is highly **specialized** and is dependent on characteristic coastal habitats and the preservation of natural coastal dynamics,

RECOGNIZING ALSO that natural coastal areas that are subject to episodic flooding (especially wetlands) contribute to the self-cleaning capacity of coastal and lagoon waters,

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<sup>1)</sup> Definition: “Coastal defence” (so called coastal protection) means all artificial or man induced structures along the coast, such as groins, jetties, sea walls, dykes. It means also infringements on natural beach or dune dynamics and beach or dune replenishment, (i.e., measures which aim to protect the coastal zone against flooding, damages by waves and erosion).

**TAKING INTO ACCOUNT** that a natural coast line is of outstanding beauty and that coastal defence measures reduce the value of the coast for environment friendly tourism,

BEING AWARE that coastal defence measures are very expensive and might cause a lot of follow up costs,

**BEING ALSO AWARE** that coastal defence measures are necessary in areas where sea currents, waves or high water levels caused by storms may threaten settlements, human life, high economical values or might destroy the cultural heritage,

RECOMMENDS to the Governments of the Contracting Parties to the Helsinki Convention:

- a) that the dynamic character and permanent change of the coast should be recognized and accepted as a natural process and that new coastal defence measures outside settlements normally not be executed except when integrated coastal zone management plans provide otherwise;
- b) that active cliffs as sediment supplier and natural coastal flood areas as potential nutrient traps should not be subject to any new coastal defence measures except when integrated coastal zone management plans provide otherwise;
- c) that coastal areas outside settlements that have been subject to episodal flooding before they were dyked for land use purposes only, should be restored as coastal wetlands through removal or relocation of dykes further inland, wherever possible;
- d) that if coastal defence measures are necessary, natural materials such as stones, sand, soil or wood shall be preferred to artificial materials (concrete, asphalt or plastic),

**RECOMMENDS ALSO** that coastal defence measures be nationally or regionally incorporated into integrated coastal zone management plans. Such plans should:

- be based on detailed knowledge of the significant physical parameters of coastal morphodynamics,
- consider the mutual relationship between physiographic, ecological and economical parameters,
- integrate these parameters into specific coastal development strategies,
- include an environmental impact assessment,
- include cost-benefit analysis of planned activities,
- be founded on suitable administrative and legal structures,

**RECOMMENDS FURTHER** that the Governments of the Contracting Parties to the Helsinki Commission should inform HELCOM about new projects and master plans for coastal defence measures.



## HELCOM RECOMMENDATION 16/4

Adopted 15 March 1995,  
having regard to Article 13, paragraph b)  
of the Helsinki Convention, 1974

### REDUCTION OF EMISSIONS INTO THE ATMOSPHERE FROM THE PULP AND PAPER INDUSTRY

#### **THE COMMISSION,**

RECALLING paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

RECALLING ALSO that according to Paragraph 2 of Article 2 of the Helsinki Convention land based pollution includes airborne pollution,

RECALLING ALSO that according to Paragraph 8 of Article 2 of the Helsinki Convention, the Contracting Parties shall endeavour to use best practical means in order to minimize airborne pollution of the Baltic Sea Area by noxious substances,

RECALLING ALSO the Ministerial Declaration at the ninth meeting of the Helsinki Commission,

DESIRING to limit the emissions into the atmosphere from the pulp and paper industry,

DESIRING ALSO more information about the emissions into the atmosphere from the pulp and paper industry,

RECOMMENDS that the Governments of the Contracting Parties as a first step take measures to reduce the emissions from the pulp and paper industry, so that the emissions of nitrogen oxides, NO<sub>x</sub>, (nitrogen oxide + nitrogen dioxide), as a yearly average for each Contracting Party's emissions from recovery boilers and lime kilns do not exceed the following values:

**Recovery boilers - existing plants, from 1 January 2000**

	I mg/MJ	II g/m <sup>3</sup> <sup>1)</sup>
Kraft Pulp	60	0.20
Sulphite Pulp	120	0.40

**Recovery boilers - new plants, from 1 January 1996**

	I mg/MJ	II g/m <sup>3</sup> <sup>1)</sup>
Kraft Pulp	50	0.15
Sulphite Pulp	95	0.30

**Lime kilns, from 1 January 2000**

	I mg/MJ	II g/m <sup>3</sup> <sup>1)</sup>
Oil fired	150	0.3
Fired with biogas or solid fuels	300	0.6

<sup>1)</sup> at 3% oxygen concentration

**RECOMMENDS FURTHER** that the Governments of the Contracting Parties as a first step take measures to reduce emissions of gaseous sulphuric compounds from the pulp and paper industry so that,

a) as a yearly average for each Contracting Party production of kraft and sulphite pulp, the following values are not exceeded from 1 January 2000:

Kraft pulp	1.0 kg S/t of pulp produced
Sulphite pulp	1.5 kg S/t of pulp produced

Emissions from all relevant sources are included except those from auxiliary boilers,

“Gaseous sulphuric compounds” include reduced sulphuric compounds like odorous gases,

**RECOMMENDS FURTHER** that the Contracting Parties within 2 years re-evaluate the emission limits concerning NO<sub>x</sub>-emission from recovery boilers - new plants and S-emissions from sulphite pulp and kraft pulp processing,

**RECOMMENDS FURTHER** that the Contracting Parties re-evaluate, before the Commission meeting in the year 2000, the emission limit values of the present Recommendation and also consider if the values should be on a plant-by-plant basis,

**RECOMMENDS ALSO** that the Contracting Parties report to the Commission every three years starting in 1997.



**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/4  
ON REDUCTION OF EMISSIONS INTO THE ATMOSPHERE FROM THE PULP  
AND PAPER INDUSTRY**

- a) Names of the relevant mills and their production figures in tonnes/year;
- b) Yearly average emissions in mg  $\text{NO}_x$ /MJ fuel input or as mass concentration from recovery boilers, lime kilns and auxiliary boilers for each mill and as an average for the Contracting Party's total emissions from these sources;
- c) Total emissions in tonnes/year of  $\text{NO}$ , from the Contracting Party's Pulp and Paper Industry;
- d) Yearly average emissions of gaseous sulphuric compounds in kg S/t from the production of kraft and sulphite pulp for each mill and as an average for the Contracting Party's total kraft and sulphite pulp production, respectively. The only emissions not to be included are those from auxiliary boilers. When calculating the emission figure for a mill, a sulphur balance can be a useful tool:
- e) Yearly average sulphur emission from auxiliary boilers measured as g S/MJ fuel input for each mill and for the Contracting Party's total Pulp and Paper Industry;
- f) Total emissions in tonnes of gaseous S per year from the Contracting Party's Pulp and Paper Industry.



## HELCOM RECOMMENDATION 16/5 \*)

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### REQUIREMENTS FOR DISCHARGING OF WASTE WATER FROM THE CHEMICAL INDUSTRY

#### THE COMMISSION,

**RECALLING** Article 5 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to counteract the introduction of certain hazardous substances, as specified in Annex I of the Convention, into the Baltic Sea Area,

**RECALLING ALSO** that according to Article 6 of the Helsinki Convention all appropriate measures to control and strictly limit pollution by noxious substances, listed in Annex II of the Convention, shall be taken, and that according to Annex III of the Convention the pollution load of industrial wastes shall be minimized,

**RECALLING FURTHER** that the Ministerial Declaration of the ninth meeting of the Helsinki Commission calls for a considerable reduction of land-based pollution,

**RECOGNIZING** that the chemical industry is responsible for an important part of the discharges of hazardous substances into the Baltic Sea,

**DESIRING** to limit the discharges from this industry with best available technology,

**DESIRING ALSO** to implement HELCOM Recommendation 9/8 concerning measures aimed at the reduction of discharges from industry,

RECOMMENDS to the Governments of the Contracting Parties that they apply the following requirements to chemical industries <sup>1)</sup> producing waste water which is discharged into waters or municipal sewerage systems:

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\*) This Recommendation supersedes the present HELCOM Recommendation 13/3

<sup>1)</sup> Industrial plants according to the Standard Classification of Chemical Industry (see Appendix)

## 1. Reaquirements in general

Waste water should only be discharged if waste water volume and pollutant load are minimized by the use of the best available technologies, inter alia:

- separation of process water from cooling water;
- separate pretreatment of waste water containing substances which due to their specific properties should preferably be removed prior to the final treatment;
- combined treatment of different waste waters containing hazardous substances only if an adequate reduction of the pollutant load is achieved compared to the purification of every single waste water stream;
- use of water-saving techniques in washing and cleaning processes such as water circulation and counter-current washing;
- multiple use of process water;
- indirect cooling systems and condensation of vapours and organic liquids instead of direct cooling systems;
- processes for generating vacuum, which do not produce waste water, should be used if there is the possibility that hazardous substances get into the water;
- processing of mother-liquors, e.g. for recovery of materials or energy;
- raw materials and auxiliaries should be selected with environmental aspects taken into consideration;
- adequate equipment for monitoring of effluent parameters should be used, e.g. flow, pH and oxygen concentration.

## 2. Reaquirements to the effluent of the plant

The mixing or diluting of different waste waters (i.e. mixing of treated process water with cooling water) for the purpose of compliance with the limit values established for the effluent should not be allowed. The total load of the parameters COD (TOC), AOX and heavy metals should be minimized first according to measures specified in Paragraph 1.

### 2.1 Chemical Oxygen Demand (COD)

For the plants discharging into water bodies the reduction of COD(TOC)-load in the following pre- and final waste water treatment facilities should be at least 80%. A lower reduction rate might be accepted but only for those waste water streams which are treated by BAT and for which special investigations have shown the reasons for lower reduction rate. This requirement should also be regarded as fulfilled when BAT has been applied and the concentration of COD in the effluent of the plant is lower than 250 mg/l.

## 2.2 Adsorbable Organic Halogen (AOX)

For the plants discharging into water bodies or connected to municipal treatment plants the resulting concentration of AOX should not exceed 1 mg/l.

This requirement should also be regarded as fulfilled if the reduction of the AOX-load in the pre- and final waste water treatment facilities is at least 80%. A lower reduction rate might be accepted but only for those waste water streams which are treated by BAT and for which special investigations have shown the reasons for lower reduction rate.

## 2.3 Heavy metals

For plants discharging into water bodies or connected to municipal treatment plants the resulting concentration in the effluent should not exceed the following values:

Mercury	(Hg)	0.05 mg/l
Cadmium	(Cd)	0.2 mg/l
Copper	(Cu)	0.5 mg/l
Nickel	(Ni)	1.0 mg/l
Lead	(Pb)	0.5 mg/l
Chromium	(Cr)	0.5 mg/l
Chromium VI	(Cr-VI)	0.1 mg/l
Zinc	(Zn)	2.0 mg/l

## 2.4 Toxicity of the effluent

For plants discharging into water bodies the toxicity effect of the waste water should be determined by two toxicity tests which could be chosen out of the following four toxicity tests:

- toxicity to fish
- toxicity to invertebrates (Daphniidae)
- toxicity to algae
- toxicity to bacteria

## 2.5 Analysing methods

Internationally accepted standardized sampling, analysing and quality assurance methods (e.g CEN-standards, ISO-standards, OECD-Guidelines) should be used whenever available,

RECOMMENDS ALSO that the above requirements and limit values be implemented for new plants by 1 January 1996 and for existing plants by 1 January 2000,

DECIDES that the above requirements be reconsidered in 1998, especially with regard to measures to reduce nutrients and further introduction of parameter TOC,

RECOMMENDS FURTHER that the Contracting Parties report to the Commission every three years starting in 1997.

**Appendix  
to HELCOM Recommendation 16/5**

**Standard Classification of Chemical Industry \*)**

**Manufacture of Chemicals and Chemical Products**

1. Manufacture of basic chemicals

1.1 Manufacture of basic chemicals, except for fertilizers and nitrogen compounds

1.2 Manufacture of fertilizers and nitrogen compounds

1.3 Manufacture of plastics in primary forms and of synthetic rubber

2. Manufacture of other chemical products

2.1 Manufacture of pesticides and other agrochemical products

2.2 Manufacture of paints, varnishes and similar coatings, printing ink and mastics

2.3 Manufacture of pharmaceuticals, medical chemicals and botanical products

2.4 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations

2.5 Manufacture of other chemical products n.e.c.

3. Manufacture of man-made fibres

**Manufacture of Refined Petrochemical Products**

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\*) This classification is based on International Standard Industrial Classification of all Economic Activities, Statistical Papers, Series M, No. 4, Rev. 3. United Nations, New York 1989

REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/5  
 CONCERNING REQUIREMENTS FOR DISCHARGING OF WASTE WATER  
 FROM THE CHEMICAL INDUSTRY

1. Country
2. Plant and its location
3. Description of capacities and actual production
4. Description of type of plant and production technology
5. Information on measures taken to reduce waste water volume and pollutant load according to Item 1 of the Recommendation
6. Water consumption in m<sup>3</sup>/year (process water only)
7. Effluent loads:

	<b>Pollution load t/year</b>	<b>Rate of reduction %</b>	<b>Concentration mg/l</b>
COD or TOC			
AOX			

<b>H e a v y m e t a l s</b>	<b>Concentration (mg/l)</b>	<b>Total load (kg/year)</b>
Hg		
Cd		
Cu		
Ni		
Pb		
Cr		
Cr-VI		
Zn		

8. Results of toxicity tests
9. Information about waste water treatment (pre-treatment and final treatment)
10. Action undertaken for reducing discharges in the last three years.



## HELCOM RECOMMENDATION 1616

Adopted 15 March 1995,  
having regard to Article 13, paragraph b)  
of the Helsinki Convention

### RESTRICTION OF DISCHARGES AND EMISSIONS FROM THE METAL SURFACE TREATMENT

#### THE COMMISSION,

**RECALLING** that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), the Contracting Parties undertake to take all appropriate measures to control and strictly limit pollution of the marine environment of the Baltic Sea Area by noxious substances,

**RECALLING ALSO** that Annex II of the Helsinki Convention defines heavy metals, halogenated compounds, cyanides and EDTA as noxious substances for the purposes of Article 6 of the Convention,

**RECOGNIZING** that metal surface treatment \*) is a notable source of discharges of these noxious substances into water and into atmosphere,

**HAVING REGARD** to the Ministerial Declaration of 1988 and to the Baltic Sea Declaration of 1990 calling, *inter alia*, for a substantive reduction of the load of pollutants most harmful to the ecosystem of the Baltic Sea,

**RECOGNIZING** the importance of limiting discharges into water and into atmosphere from the metal surface treatment by application of Best Available Technology,

**DESIRING** more information about the discharges from the metal surface treatment,

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\*) This Recommendation should apply primarily to plants in which surfaces are plated with metals electrolytically or chemically. This involves the following main operations:

- pre-treatment (e.g. degreasing/cleaning and pickling);
- electrolytic or chemical deposition of metals, including intermediate treatment;
- post-plating treatment (e.g. chromating, dyeing);
- stripping;
- phosphating

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention take the following measures to reduce the volume of waste water discharged from metal surface treatment and its pollutant load:

- a) if technically possible, substitution of hazardous substances (e.g. cyanide, cadmium, mercury, EDTA and similar sequestering agents, nonylphenol-ethoxylates, chlorinated organics) by substances which are readily biodegradable, non-bioaccumulating and non-mutagenic and have a low toxicity;
- b) substitution of EDTA in degreasing baths, stripping baths and chemical nickel plating baths. Possible substitutes include e.g. citric acid, tartaric acid and gluconic acid;
- c) substitution of processes generating noxious substances wherever possible (e.g. cyanide oxidation with hypochlorite);
- d) treatment of process baths using suitable processes in order to have the longest possible service life. Such processes include e.g. membrane filtration, ion exchange, electrolysis, thermal processes and evaporation;
- e) retention of bath ingredients by suitable means, such as transporting the goods in such a way that drag-out is minimized; splash guards or optimized bath composition;
- f) multiple use of counter-current rinse waters (at least three rinsing steps should be applied). Suitable techniques to keep more than 90% of the drag-out in a small volume for recovery/recycling are e.g. :
  - (i) 3-stage cascade rinsing;
  - (ii) 2-stage cascade rinsing plus closed cycle rinsing with ion exchange;
  - (iii) combined dip/spray/mist rinsing techniques.

If possible these rinsing concentrates should be returned into the process baths, if necessary after specific treatment/concentration. By applying these rinsing techniques process baths can often be operated as closed water/low waste systems;

- g) separation of suitable non-ferrous metal waste water streams to carry out internal recycling (e.g. by electrolysis) or external recovery (e.g. by non-ferrous metal industry);
- h) recovery of EDTA from chemical copper plating baths (e.g. by precipitation as  $H_4EDTA$ ) and their rinse baths (e.g. by precipitation after a concentration step, e.g. by anion exchange),

RECOMMENDS ALSO that, as a first step, the Government of the Contracting Parties take the following measures to control and minimize noxious substances in waste waters from the metal surface treatment:

- a) waste water streams should be separated according to the kind of necessary treatment and to achieve a sludge composition such that the metals can be recovered. The treatment should be carried out in batch reactors;



- b) cadmium and mercury containing water streams should be treated and monitored separately with the following maximum concentrations:

Cadmium - 0.2 mg/l  
Mercury - 0.05 mg/l;

- c) before discharging into sewers or surface waters the treatment should be provided so that from 1 January 1996 for new plants and from 1 January 2000 for existing plants the concentrations of the following substances do not exceed the following levels (without any dilution before discharge):

<b>Substance</b>	<b>Concentration (mg/l)</b>
Chromium (total)	0.7
Chromium (VI)	<b>0.2</b>
Copper	<b>0.5</b>
Lead	<b>0.5</b>
Nickel	1.0
Silver	<b>0.2</b>
Zinc	<b>2.0</b>
Unbound cyanide	<b>0.2</b>
Volatile organic halogens (VOX)	0.1

Plants discharging small loads of metals (defined as sum of total chromium, copper, lead, nickel and zinc less than 200 g/day prior to end-of-pipe treatment) may be subject to limit values up to maximum four times higher for total chromium, copper, lead and nickel. Maximum concentration of zinc shall not exceed 4 mg/l;

- d) in some cases organic substances could be present in the waste water. Thus, if possible and considered suitable, such waste water from the metal surface treatment should undergo biological treatment. This includes treatment in a municipal sewage treatment plant,

**RECOMMENDS FURTHER** that the Governments of the Contracting Parties take measures to avoid as far as possible the use of chlorinated solvents.

They should be replaced by water-based systems or non-halogenated organic solvents. In specific cases, where it is proven that substitution is technically not possible, the following requirements should be met

- a) In operating surface treatment plants, the only volatile chlorinated hydrocarbons which should be used for degreasing are commercial-grade tetrachloroethene, trichloroethene or dichloromethane. The use of other halogenated solvents is not necessary for technical reasons. Substances widely acknowledged as carcinogenic should not be contained as additives in, nor be added to, the halogenated hydrocarbons;

- b) Surface treatment plants should be established and operated in such a way that goods to be processed should be treated in an enclosure in the cases where volatile solvents are used. This enclosed plant, except for the openings for venting the waste gases, is sealed on all sides;
- c) Vented waste gas should be led to a separator which is used to ensure that the emissions of volatile halogenated hydrocarbons do not exceed a mass concentration of 20 mg/m<sup>3</sup>. As a variation from this: if the solvent contains more than 50% of dichloromethane in the volatile halogenated hydrocarbons, the emission, may not exceed a mass concentration of 50 mg/m<sup>3</sup>. These concentrations should not be achieved by diluting the waste gas with air. The separated volatile halogenated hydrocarbons should be recovered;
- d) Halogenated snts or residues containing halogenated solvents should be stored, transported and handled in closed vessels;
- e) The waste water from processes in which volatile halogenated hydrocarbons are used (e.g. greasing, degreasing) should be treated separately and should comply with the following limit value:

Sum of trichloroethene, tetrachloroethene and dichloromethane: less than 0.1 mg/l (expressed as chlorine in a representative sample),

**RECOMMENDS FURTHER** that the Contracting Parties re-evaluate in three years the limit values of this Recommendation and reconsider them as appropriate,

**RECOMMENDS FURTHER** that the Contracting Parties report to the Commission every three years starting from 1997.

**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/6  
ON RESTRICTION OF DISCHARGES AND EMISSIONS FROM  
THE METAL SURFACE TREATMENT**

Country \_\_\_\_\_ Year \_\_\_\_\_

1. For the whole branch:
  - a) General description of the branch especially concerning legal conditions and the efforts to minimize the loads by implementing BAT;
  - b) Number of plants discharging to water bodies and number of plants connected to municipal treatment plant;
  - c) Figures of waste water volume, pollutant loads and waste characteristics;
  - d) VOC emission data.



## HELCOM RECOMMENDATION 16/7

Adopted 15 March 1995,  
having regard to Article 13, paragraph b)  
of the Helsinki Convention

### BASIC PRINCIPLES IN WASTE WATER MANAGEMENT IN THE LEATHER INDUSTRY

#### THE COMMISSION,

**RECALLING** Article 5 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to counteract the introduction of certain hazardous substances, as specified in Annex I of the Convention, into the Baltic Sea Area,

**RECALLING ALSO** that according to Article 6 of the Helsinki Convention all appropriate measures to control and strictly limit pollution by noxious substances listed in Annex II of the Convention, shall be taken, and that according to Annex III of the Convention the pollution load of industrial wastes shall be minimized,

**RECALLING FURTHER** that the Ministerial Declaration of the ninth meeting of the Helsinki Commission calls for a considerable reduction of land-based pollution,

**RECOGNIZING** that the leather industry is responsible for a part of the discharges of hazardous substances, especially chromium, into the Baltic Sea,

**RECOGNIZING ALSO** that many leather industry plants discharge to municipal sewerage systems where HELCOM Recommendation 13/2 should be applied,

**RECOMMENDS** to the Governments of the Contracting Parties that they apply to leather industry plants discharging into water bodies or municipal sewerage systems, the following basic principles:

- a) to reduce pollution loads from the leather industry Best Available Technologies as per examples listed in Appendix 1, should be selectively applied. It is essential to reduce the volume of waste water discharges through, i.a., a specific water consumption reduction to a maximum rate of 50 m<sup>3</sup>/t input hide;

- b) waste water discharges into either water bodies or municipal sewerage systems should be treated using optional waste water treatment processes, examples of which are listed in Appendix 2;
- c) the limit values for waste water discharges from the leather industry into water bodies or municipal sewerage systems should not exceed the following values:

Cr<sub>tot</sub> - 0.075 kg/t input hide as annual mean and 1.5 mg/l Cr as 24 h-value or shorter sampling period

COD<sub>h</sub> - 20 kg/t input hide as annual mean for discharges to water bodies and for discharges into sewerage systems which are not connected to municipal treatment plants

tot-N - 8 kg /t input hide as annual mean for discharges to water bodies and for discharges into sewerage systems which are not connected to municipal treatment plants

Internationally accepted standardized sampling, analysing and quality assurance methods (e.g. CEN-standards, ISO-standards and OECD-Guidelines) should be used whenever available;

- d) the tanning odour influence should be taken into account in siting of a new production unit as well as in a sludge dumping location,

**RECOMMENDS ALSO** that the above limit values should be implemented for production units newly constructed or reconstructed by 1 January 1996, and for existing units by 1 January 2000,

**DECIDES** that the above limit values be re-examined in 1998,

**RECOMMENDS FURTHER** that the Contracting Parties report to the Commission every three years starting in 1997.

**BEST AVAILABLE TECHNOLOGY****Examples of preventive technologies in leather industry reducing the amounts of pollutants**

Examples of preventive technologies	Potential pollutants	Manufacturing process	Reduction
General good house-keeping, short floats, modern tannery vessels, spring valves, recycling	Water consumption general	All wet processes	Water consumption
Hide chilling	Salt	Hide preserve	No salt
Hair recovery	High COD and BOD	Unhairing and BOD	Reduced COD
Reduced sulphide unhairing	Sulphide	Unhairing	Reduced sulphide
Low-lime unhairing	Lime	Unhairing	Reduced SS (lime)
Ammonium free <b>deliming</b>	Ammonium compounds	<b>Deliming</b> bating	No use of ammonia Reduced BOD and N
Aqueous degreasing	Solvents (effluent)	Degreasing	No solvent
Improved chromium exhaustion/fixation	Chromium	Chrome tanning	Reduced chromium effluent
Chromium recovery/recycling	Chromium	Chrome tanning	Reduced chromium effluent
Chromium <b>replace-</b> ment partial or complete	Chromium	Chrome tanning	Reduced or no chromium effluent and solid waste
Wet white <b>pretanning</b>	Chromium	Chrome tanning solid waste	Reduced chromium

## Appendix 2

### Examples of waste water treatment processes for leather industry

Examples of treatment processes	Potential pollutants	Reduction
<b>1. <u>Pretreatment</u></b>		
Screening	large fragments	up to <b>30-40%</b> of total SS
Settling	COD	up to 30%
Flow equalization (balancing)		neutralization agent and possibility of mutual precipitation in certain cases
<b>2. <u>Primary treatment</u></b>		
Catalytic oxidation or direct precipitation of sulphides	sulphides	lower pH
Precipitation/Flocculation Chromium	chromium	up to 0.5 mg/l
Physical-chemical treatment for BOD and solids removal	BOD SS	up to <b>95%</b> of SS around 70% of BOD
<b>3. <u>Secondary treatment</u></b>		
Biological treatment - biological filters - activated sludge (oxidation ditch) activated sludge (conventional) - anaerobic process (lagoons)	BOD COD	below 20 mg/l of BOD, and 250 mg/l of COD  up to 85% of BOD,
<b>4. <u>Tertiary treatment</u></b>		
Nitrification/denitrification	N	eutrophication reduction
Sedimentation/filtration	s s	up to 95% efficiency

**REPORTING FORMAT ON HELCOM RECOMMENDATION 16/7  
CONCERNING BASIC PRINCIPLES IN WASTE WATER MANAGEMENT  
IN THE LEATHER INDUSTRY**

1. Country
2. Plant and location
3. Actual production (tonnes of input hides/a and/or m<sup>2</sup>/a)
4. Water consumption, sewage discharge and pollution loads

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Water consumption m <sup>3</sup> /a _____	Sewage discharged into: municipal sewerage systems m <sup>3</sup> /a _____	water bodies m <sup>3</sup> /a _____
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Parameters	Specific load (kg/t) or max Load concentration (t/a) (mg/l) for Cr <sub>tot</sub> only	Load (t/a) Specific load (kg/t) or max concentration (mg/l) for Cr <sub>tot</sub> only
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Cr<sub>tot</sub>

COD<sub>Cr</sub> \*)

tot-N

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\*) For Contracting Parties who are measuring TOC the conversion factor should be indicated

5. Description of technological processes, chemicals in use, preventive and waste water treatment processes
6. Actions undertaken for reducing discharges in the last three years.





## HELCOM RECOMMENDATION 16/8

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### LIMITATION OF EMISSIONS INTO ATMOSPHERE AND DISCHARGES INTO WATER FROM INCINERATION OF HOUSEHOLD WASTE

THE COMMISSION,

RECALLING Paragraph 1 of Article 6 of the Convention on the Protection of Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

RECALLING ALSO that according to Paragraph 2 of Article 2 of the Helsinki Convention land-based pollution includes also airborne pollution,

RECALLING ALSO that according to Paragraph 8 of Article 6 of the Helsinki Convention, the Contracting Parties shall endeavour to use best practical means in order to minimize airborne pollution of the Baltic Sea by noxious substances,

RECALLING ALSO the Ministerial Declaration of the ninth meeting of the Helsinki Commission,

RECALLING ALSO the Baltic Sea Declaration of 1990,

RECOGNIZING the importance of reducing the emissions into atmosphere and discharges into water from municipal waste incineration by

- (i) minimizing the hazards to human health and to the environment from toxic, persistent and bioaccumulative substances by the application of best environmental practice and best available technology;
- (ii) developing processes and techniques for the collection and treatment of atmospheric emissions,

RECOMMENDS to the Governments of the Contracting Parties to the Helsinki Convention that the application of best environmental practice and best available technology to waste minimization, handling and incineration should include the actions described in Appendix,

RECOMMENDS ALSO that

1. Atmospheric emissions from waste incineration may, for new plants (starting operation after 1 January 1996) should not exceed the following levels at 9 per cent CO<sub>2</sub> (or 11 per cent O<sub>2</sub>):

HC1            50 mg/m<sup>3</sup> (ndg), monthly mean value

Hg             0.05 mg/m<sup>3</sup> (ndg), inspection value for new plants

Dust           30 mg/m<sup>3</sup> (ndg), weekly mean value

CO             100 mg/m<sup>3</sup> (ndg), monthly mean value, for plants with a capacity over 25 000 tonnes/year

200 mg/m<sup>3</sup> (ndg), monthly mean value, for plants with a capacity less than 25 000 tonnes/year,

2. Atmospheric emissions of dioxins (TCDD-equivalents according to the International (ITEF) Model) should as a guidance value not exceed 0.1 ng/m<sup>3</sup>(ndg) for new plants.

Internationally accepted standards should be used for dioxin sampling and analysis.

3. Aqueous discharges after wet condensation systems or flue gas scrubbers may, for new plants not exceed the following levels on a yearly basis:

Cd            15 mg/tonne incinerated waste

Hg            15 mg/tonne incinerated waste

Pb            30 mg/tonne incinerated waste

Co            150 mg/tonne incinerated waste

Cu            150 mg/tonne incinerated waste

Cr            150 mg/tonne incinerated waste

Ni            150 mg/tonne incinerated waste

Zn            300 mg/tonne incinerated waste

pH-level in discharged water may not be below 7.0,

**DECIDES** that the specific actions described in the Appendix should be kept updated and be revised when appropriate by the Technological Committee,

**DECIDES ALSO** that this Recommendation, in the light of EU regulations for this sector, be re-examined in 1999 regarding requirements and limit values, for new as well as for existing plants.

**RECOMMENDS FURTHER** that the Contracting Parties report to the Commission every three years starting 2000.

## Appendix

Application of best environmental practice (BEP) and best available technology (BAT) to waste minimization, handling and incineration should include the following actions:

A. Waste minimization and recycling

Introduction of general policies aiming at an overall minimization of total mass of domestic waste and recycling of materials whenever possible. Such policies would reduce emissions and discharges by reducing the total amount of waste that has to be handled and disposed of. Less production of fresh raw materials might also reduce the environmental load.

Recyclable material in household waste are e.g. scrap metals, newspapers, cardboard paper, glass, aluminium cans and tin cans;

B. Dangerous materials

Introduction of general policies aiming at an overall reduction or total elimination of heavy metals, halogenated substances and toxic compounds in consumer goods, packaging etc. for mass consumption. Product control measures are effective way of keeping environmentally dangerous substances out of the domestic waste stream and thus reducing overall emissions from waste incineration;

C. Waste collection and separation

Introduction of general waste collection and separation schemes as a means of controlling the quality of the waste fed to the incinerators. **Recyclables**, hazardous waste and similar dangerous materials as well as non-combustibles should not enter incinerators for household waste, in order to reduce the overall emissions.

Collection schemes should include source separation of **recyclables** and hazardous products such as batteries containing Hg or Ni/Cd, used motor oils, solvents, paints mercury-containing switches and thermometers, pharmaceuticals, lead accumulators, chlorinated plastics, etc.;

D. Open-air incineration

Open-air incineration of household waste should not be allowed, not even in small scale, because such incineration gives rise to very high specific pollution loads.

Routines at landfill sites for domestic waste should be carried out in such a way that unintentional fires can be avoided to a very high extent. One single accident may produce more pollution than emission from one whole year's operation in a good full-size incinerator;

E. The waste incineration process

The incineration process should fulfill the following requirements:

recovery of heat for production of hot water for district heating systems, steam for electricity generation etc., thus eliminating the need for usage of other fuels for the energy production,

controlled combustion temperature, minimum 850°C in the incinerator. When starting and stopping the process or whenever the temperature falls below 850°C, auxiliary fuels should be used,

controlled air supply,

instrumentation for continuous monitoring of the combustion process as a means of efficient operation of the incinerator. The instrumentation should include monitors for carbon monoxide, carbon dioxide or oxygen, nitrogen oxides, opacity or dust in the flue gases as well as combustion temperature,

efficient cooling of the flue gases and frequent particle removal (soot blowing), minimizing the residence time for the flue gases in the temperature interval of 600°C-200°C,

fabric filters or equally efficient arrestment systems for removal of dust from the flue gases,

efficient arrestment systems for removal of acids, organics and organohalogenes, e.g. dioxins, from the flue gases. Dry or semi-dry lime systems as well as wet systems could be applicable,

treatment of condensates and liquid remainders from the flue gas purification by chemical precipitation with lime, sulphide and polymer. Sedimentation, sand filtration and filtration with activated carbon,

handling of slag and fly-ash in closed or wet systems to avoid spreading of dust and secondary pollution. Fly-ash disposal in dry landfills to avoid leaching. Pretreatment by solidification should be carried out if the concentration of leachable Pb or Cd is high,

training of staff to secure skilled operation of the incinerator at all times.

**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/8  
CONCERNING LIMITATION OF EMISSIONS INTO ATMOSPHERE AND  
DISCHARGES INTO WATER FROM INCINERATION OF HOUSEHOLD WASTE**

1. Country
2. Number of new plants (operation started after 1 January 1996) and the annual amount of waste incinerated in each plant
3. Number of new plants complying with the Recommendations including available emission data on
  - a) HCl emissions
  - b) Hg emissions
  - c) dust emissions
  - d) CO emissions
  - e) dioxin emissions
  - f) metals discharges



## HELCOM RECOMMENDATION 16/9

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### NITROGEN REMOVAL AT MUNICIPAL SEWAGE WATER TREATMENT PLANTS

#### THE COMMISSION,

**RECALLING** Paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

**RECALLING ALSO** Paragraph 1 of Annex III of the Helsinki Convention in which the Contracting Parties agree to treat municipal sewage in an appropriate way so that the amount of organic matter does not cause harmful eutrophication of the Baltic Sea Area,

**RECALLING FURTHER** HELCOM Recommendation 9/2 in which the use of effective methods in waste water treatment is stressed upon,

RECOGNIZING that nitrogen removal has been found to be necessary in many parts of the Baltic Sea Area,

**DESIRING** to limit this pollution,

RECOMMENDS to the Governments of the Contracting Parties to the Helsinki Convention that

- a) municipal sewage treatment plants, located in areas sensitive to nitrogen, should be equipped with nitrogen removal according to the following stipulations, where values for concentration or for the percentage of reduction are applied:

Size of treatment plant	Concentration tot-N, mg/l <sup>1)</sup> (yearly average)	Minimum <sup>2)</sup> percentage reduction	Year (end of)	Countries in transition
10 001-50 000 pe	15	<b>70-80</b>	<b>1998</b>	<b>2020</b>
<b>50 001-100 000 pe</b>	15	70-80	1998	2020 <sup>4)</sup>
> 100 000 pe	10 <sup>3)</sup>	70-80	1998	2010

<sup>1)</sup> tot-N means the sum of total Kjeldahl nitrogen (organic N + NH<sub>4</sub>), nitrate (NO<sub>3</sub>-nitrogen and nitrite (NO<sub>2</sub>-nitrogen

<sup>2)</sup> reduction in relation to the load of the **influent**

<sup>3)</sup> alternatively the daily average must not exceed 20 mg/l N. This requirement refers to a water temperature of 12° C or more during the operation of the biological reactor of the waste water treatment plant. As a substitute for the condition concerning the temperature, it is possible to apply a limited time of operation, which takes into account the regional climatic conditions

<sup>4)</sup> most urgent plants should be equipped with nitrogen removal by 2010. Those plants should be specified to the Commission not later than in 1997.

b) the results of assessments which have evaluated areas for being sensitive or non-sensitive should be reported every three years according to the reporting format to the Commission,

**RECOMMENDS ALSO** that the Contracting Parties re-evaluate the present Recommendation and reconsider it in 1995 taking into account new developments on national or international or EU level for Member States. National and international research on the need, technology and economics of nitrogen removal should be intensified,

**RECOMMENDS FURTHER** that the Contracting Parties report to the Commission in 2000 and thereafter every three years.

**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/9  
CONCERNING NITROGEN REMOVAL AT MUNICIPAL SEWAGE WATER TREAT-  
MENT PLANTS**

1. Country
  
2. For the different size classes (10 001-50 000 pe, 50 001-100 000 pe, > 100 000 pe) give the following data:
  - number of plants within the catchment area of the Baltic Sea
  
  - number of plants which are located in sensitive areas
  
  - number of plants which are located in sensitive areas and are in compliance with this Recommendation
  
3. Results of assessments which have evaluated areas for being sensitive or non-sensitive
  
4. Please give a map of sensitive and non-sensitive areas.





## HELCOM RECOMMENDATION 16/10

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### REDUCTION OF DISCHARGES AND EMISSIONS FROM PRODUCTION OF TEXTILES

THE COMMISSION,

RECALLING Paragraph 1 of Article 6 of the Convention on the Protection of Marine Environment of the Baltic Sea Area, 1992 (Helsinki Convention), in which the Contracting Parties undertake to prevent and eliminate pollution of the marine environment of the Baltic Sea Area from land-based sources,

RECALLING ALSO that according to Paragraph 2 of Article 2 of the Helsinki Convention land-based pollution includes also airborne pollution,

RECALLING ALSO the Ministerial Declaration of the ninth meeting of the Helsinki Commission,

RECALLING ALSO the Baltic Sea Declaration of 1990,

**RECOGNIZING** the importance of reducing the discharges into waters and the emissions into the atmosphere from the production of textiles because of the use or creation of substances with toxic, persistent and bioaccumulative properties during the production process,

RECOGNIZING the importance of HELCOM Recommendation 13/2 concerning industrial connections to municipal sewage systems for the production of textiles,

RECOMMENDS that the Governments of the Contracting Parties to the Helsinki Convention agree on the following definitions for the purposes of this Recommendation

- \* “Textile” means any product derived from the manufacture of natural fibres such as wool, cotton, flax and/or the manufacture of fibres synthesized and processed from petrochemicals and modified wood pulp such as polyester, nylon, polypropylene and viscose. These products can be yarns, fabrics or consumer products (e.g. garments, carpets, upholstery, technical textiles)

\* **“Textile Production”** means the preparation of natural and man-made (semi-natural and synthetic) fibres, including both:

- a) the mechanical processes such as carding, spinning, weaving, knitting or tufting, and
- b) the physicochemical processes which mainly take place in aqueous (‘wet’) media, such as the pretreatment, the colouring or printing and the finishing of the fibres, yarns and fabrics.

The upstream delimitation is the production of the raw material from which a treatable fibre can be produced (both the growing of natural fibres and the production of (semi-)chemical fibres, such as viscose); these processes are not considered in this Recommendation.

The downstream delimitation is determined by the last process which alters the intrinsic properties of yarns and fabrics, before they are handled or reassembled into final products (clothing industry, etc.),

**RECOMMENDS FURTHER** to the Governments of the Contracting Parties that they take the following measures to reduce pollution from production of textiles

1. The application of best available technology to the production of textiles should include the following techniques of abatement, recycling and treatment to reduce the discharges into waters and the emissions into the atmosphere

non-use of Chromium (VI) as oxidation agent for sulphur dyes;

non-use of the hazardous substances polychlorinated biphenyles (PCB) and pentachlorophenol;

non-use of arsenic, mercury and their compounds as biocides;

substitution of hazardous substances as e.g. trichlorobenzenes and alkylphenolethoxilates (APEO);

use of chlorinated substances as solvents only in air-closed systems with recirculation of the solvent except for use in small quantities for spot removal in order to avoid wasting of valuable produced textile. They should only be used when their overall environmental impact is considered less damaging than other methods for grease removal ;

use of hydrocarbons which contain minimized content of aromatic hydrocarbons (with a percentage of carbon atoms linked in aromatic rings of less than 1 per cent).

According to a case-by-case evaluation it should be decided whether the following techniques could be realized in the plant:

substitution of bleaching with chlorine-containing substances (e.g. hypochlorite) by bleaching with non-chlorine-containing substances (e.g. H<sub>2</sub>O<sub>2</sub>);

separation, concentration (e.g. ultrafiltration) and reuse of synthetic sizes (e.g. polyacrylates and polyvinylalcoholes);

no discharge into waste water of liquid or solid unused concentrates (e.g. remains of dyes, sizes or painting pastes);

reuse of sodium hydroxide from washing water from the mercerizing process;

separation of hot and cold waste water to establish regaining of heat;

reuse of low contaminated washing waters by e.g. counterflow techniques for continuous processes; in discontinuous processes overflow-rinsing should be avoided (i.e. the process bath should be emptied before rinsing takes part);

use of equipment that gains the conservation of energy, water and chemicals (e.g. controlled addition of chemicals by automatized colour-kitchen and computerized recipes).

2. The following limit values should not be exceeded for discharges into water bodies

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	<b>2 hr sampling or 24 hr sampling</b>	
Chemical Oxygen Demand (COD,,)	160 mg/l	
Phosporus total	2 mg/l	
Colour *), **):		
spectral absorption coefficient at	436 nm	7 m <sup>-1</sup>
	525 nm	5 m <sup>-1</sup>
	620 nm	3 m <sup>-1</sup>

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\*) according to Section 2 of EN 27887

\*\*) other determination methods could be used if it can be shown that the results are comparable and equivalent

3. The following limit values should not be exceeded for discharges into water bodies and municipal treatment plants

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Active Chlorine	1 mg/l **)
Adsorbable organic halogens (AOX)	1 mg/l
Chromium (VI)	0.2 mg/l
Chromium, total	0.7 mg/l
Copper	0.5 mg/l
Zinc	2 mg/l

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\*\*) only be measured if hypochlorite or chlorodioxide is used in the plant

#### 4. Toxicity Tests

The toxicity effect of discharges into water bodies should be determined by (at least) two toxicity tests which could be chosen out of the following four toxicity tests

- toxicity to fish;
- toxicity to algae;
- toxicity to invertebrates (Daphniidae);
- toxicity to bacteria.

5. The following limit values should not be exceeded for emissions into the atmosphere out of the production of textiles

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	<b>if mass low kg/h</b>	<b>concentration mg/m<sup>3</sup></b>
chlorine	$\geq 0.05$	5
sum of volatile organic compounds	$\geq 3$	150

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These requirements have to be met only for textile producing plants, which colour flock, yarn or fabric by use of carriers;

or

bleach yarn or fabric by use of alkalies, chlorine or compounds containing chlorine;

or

finish textiles by more than 500 m<sup>2</sup> textiles/hour.

#### 6. Analysing methods

Internationally accepted standardized sampling, analysing and quality assurance methods (e.g. CEN-standards, ISO-standards and OECD Guidelines) should be used whenever available,

RECOMMENDS **ALSO** that these measures should be implemented by 1 January 1998 for new plants and by 1 January 2000 for existing plants,

RECOMMENDS **FURTHER** that the Contracting Parties report to the Commission in year 2000 and thereafter every three years.

**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/10  
CONCERNING REDUCTION OF DISCHARGES AND EMISSIONS FROM  
PRODUCTION OF TEXTILES**

Country \_\_\_\_\_ Year \_\_\_\_\_

**A. Plants which discharge directly into surface waters**

- 1) Name, location (map) and production structure of the plant.
- 2) Description of waste water collecting and treatment systems including waste water volume, measures for its minimization and recycling processes.
- 3) Description of efforts to substitute hazardous substances.
- 4) Discharge data for COD, AOX, Tot-P and heavy metals.
- 5) Data for results of toxicity tests and colour measuring.
- 6) Data for air emissions.

**B. Plants which discharge into municipal treatment plants**

- 1) Number of plants, their overall waste water volume and emission situation (waste water and air).
- 2) Details about measures to avoid, to recycle and pretreat the waste water.
- 3) Description of efforts to substitute hazardous substances.



## HELCOM RECOMMENDATION 16/11\*)

Adopted 15 March 1995,  
having regard to Article 13, Paragraph b)  
of the Helsinki Convention

### MEASURES TO REDUCE POLLUTION BY PESTICIDES FROM AGRICULTURE, FORESTRY AND HORTICULTURE

#### THE COMMISSION,

**RECALLING** that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

**RECOGNIZING** the importance of agriculture as a source of pollution of the environment by pesticides,

**DESIRING** to limit this pollution by accomplishing special measures concerned,

**RECOMMENDS** to the Governments of the Contracting Parties to the Helsinki Convention that the use of pesticides in agriculture, forestry and horticulture should be managed under the following conditions in conformity with the code of conduct on the distribution and use of pesticides adopted by the FAO in 1985:

- a) Application technology and practice should be designed to prevent unintentional application or run-off of pesticides to bodies of water. Establishment of protection zones beside bodies of water should be encouraged and application by aircraft should be strictly controlled;
- b) Handling and storage of pesticides should be carried out so that there is no spillage or leakage to bodies of water or to the ground water. Washing of spraying equipment and disposal of pesticide containers should be strictly controlled;

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\*) This Recommendation supersedes HELCOM Recommendation 8/2

- c) Knowledge about the environmental problems caused by pesticides should be improved by collecting and exchanging information on the presence and effects of pesticides in the marine environment of the Baltic Sea and water courses discharging to the Baltic Sea.

The codes of BEP for the use of pesticides included in Attachment 1 should be applied by the Contracting Parties;

- d) The environmentally sound use of pesticides should be encouraged by informing and educating farmers and advisors along the lines indicated in Attachment 2;
- e) Alternative methods of control of agricultural pests and weeds should be developed and their use encouraged wherever appropriate,

RECOMMENDS ALSO that the Contracting Parties should report to the Commission on their national measures taken in accordance with this Recommendation in 1997 and every three years thereafter,

**RECOMMENDS FURTHER** that information on results of investigations and approved technology should be exchanged between the Contracting Parties.

## CODES FOR BEST ENVIRONMENTAL PRACTICE

A first priority should be given to the promotion of management regimes and technology reducing or eliminating the need for application of pesticides.

### Before Use

- give preference to safer non-toxic and non-persistent products;
- ensure adequate knowledge of plant protection and pesticide effects;
- ensure adequate experience;
- stress in the cultivation plan should be on crop rotation, high-quality seed, adequate soil preparation and alternative pest control methods;
- use only when there is a need;
- consider alternatives, if available;
- use early warning systems, i. .a forecast of foreseeable agricultural pests or plant diseases and agro-meteorological forecast;
- avoid surplus pesticides (waste) by exact calculation or amounts needed;
- don't buy what you don't need;
- take note of information on container; consult experts for most recent information;
- application on non-agricultural land only in exceptional cases and with agreement of the authority in charge;
- application on natural grazing land only in exceptional cases and with agreement of the authority in charge;
- dispersal of pesticides (or treated seeds) by aircraft for agriculture and horticulture purpose only in exceptional cases and with agreement of the authority in charge;
- avoid unwanted effects in neighbouring areas (land shape, wind, temperature), notify if necessary (bee-keepers);
- keep "pesticide journal" (contents specified);
- use equipment that is: approved, well-maintained, correctly adjusted, regularly checked (by farmers as well as by the authorities);
- use filling provisions designed to prevent spillage to water;
- make reliable calculations of amounts needed; prepare the lowest effective amounts;
- notify authorities in case of spillage.

### During Use

use pesticides according to good plant protection practice;

avoid wind drift:

\* don't spray under windy conditions > 5 m/s or temperatures > 25° C;

be aware of other cultivation, bee-keeping, water courses, water supplies;

avoid spreading in ditches, verges, forest fringes, grazing land;

maintain protection zones in order to prevent penetration of pesticides into water bodies;

don't spray when there is a risk of surface runoff;

act in accordance with requirements for specific protection zones;

be aware of pollinating insects (specific pesticides);

don't use aquatoxic pesticides near water courses or water wells;



don't mix pesticides unless this is recommended in the instruction or by the official advisers;  
notify the public if area to be treated abuts areas open to the public and the public is possibly endangered, by specified sign.

#### After Use

- prevent emissions from equipment cleaning;
- have spent containers of pesticide residue treated by sub-contractor or municipality;
- dilute small quantities of residues and spread over treated area;
- clean equipment thoroughly, inside and outside; not near water;
- spread cleaning water over treated area;
- spread rinsing water and other water (containing e.g. soda) over suitable land;
- notify authorities in case of contamination;
- rinse empty containers at least 3 times; use solution for preparation;
- dispose of not-thoroughly cleaned as chemical waste (call municipal authorities or sub-contractor).

**Additional considerations to be taken into account**

Education and information should aim at:

- promotion, as a first priority, of the knowledge of management regimes and technology reducing or eliminating the need for application of pesticides;
- promotion of the use of safer non-toxic and non-persistent pesticides;
- preventive methods;
- integrated methods aiming at using a minimum of chemicals;
- good knowledge on the environmental risks with the use of pesticides.

Spraying equipment:

- better service and maintenance;
- control of the function;
- development of better equipment.

Pesticide registration:

- reconsideration of old substances in the light of modern criteria;
- strict requirements to avoid environmental risk for the approval of new substances.

Extension service:

- better prognostication system for the need of action against pests and weeds;
- better practical advice:
  - \* due to the actual situation of the actual field and farm
  - \* due to the crop rotation
  - \* due to crop and crop variety
- choice of the best moment for spraying regarding the crop, the pest or weed, the temperature, the wind, the moisture of the air, etc.
- choosing as low dosage as possible
- choosing as environmentally harmless pesticide as possible
- giving practical advice of other methods than chemical methods.

LIST OF MEETINGS, SEMINARS AND WORKSHOPS UNDER THE AUSPICES OF  
THE HELSINKI COMMISSION  
AS AGREED BY THE **16th** MEETING OF THE COMMISSION

Spring 1995 Poland	Workshop on Good Agricultural Practice (GAP)
20-23 March 1995 Kaunas. Lithuania	Seminar on Food Industry
21-23 March 1995 Tallinn, Estonia	Meeting of the ICES/HELCOM Steering Group on Quality Assurance of Chemical Measurements in the Baltic Sea
April 1995 Denmark	Informal meeting for comparison of the selected methodologies to estimate natural and anthropogenic contributions to riverine fluxes
4-6 April 1995 Gdansk, Poland	Third Meeting of the <u>ad hoc</u> Working Group on Reception Facilities in Ports (MC REFAC 3)
5-6 April 1995 Hamburg, Germany	Meeting of EC/TC-Chairmen
10-12 April 1995 HELCOM Secretariat	Seventh Meeting of the <u>ad hoc</u> Working Group on Air Pollution from Ships (MC AIR 7)
10-12 April 1995 Copenhagen, Denmark	Meeting of the ICES/HELCOM Steering Group for the Coordination of the Baseline Study on Contaminants in the Baltic Sea Sediments
19-21 April 1995 Helsinki, Finland	Meeting of the Discipline Group “Pelagic Biology” of the Third Periodic Assessment
24-28 April 1995 Copenhagen, Denmark	ICES/HELCOM Workshop on Temporal Trend Assessment of Data on Contaminants in Biota from the Baltic Sea
26-28 April 1995 Gdansk, Poland	Twelfth Meeting of the Group of Experts on Airborne Pollution of the Baltic Sea Area (EC EGAP 12)
2-5 May 1995 Roosta, Estonia	Fifth Meeting of the Working Group on Nature Conservation and Biodiversity (EC NATURE 5)
3-5 May 1995 Cuxhaven, Germany	Second Meeting of the Informal Working Group on Revision of the HELCOM Combatting Manual (CC MANUREV 2)

8-12 May 1995 Stockholm, Sweden	Fifth Meeting of the Working Group on Reduction of Inputs from Diffuse Sources (TC DIFF 5)
11-12 May, 1995 Uppsala, Sweden	Meeting of the <u>ad hoc</u> Working Group on Coastal Monitoring
15-19 May 1995 St. Petersburg, Russia	Tenth Meeting of the Group of Experts on Monitoring of Radioactive Substances in the Baltic Sea (EC MORS 10)
22-26 May 1995 Pärnu, Estonia	Fifth Meeting of the Working Group on Reduction of Discharges and Emissions from Point Sources (TC POINT 5)
29 May - 2 June 1995 Germany	HELCOM BALTEX DELTA Combatting Exercise
30 May - 1 June 1995 St. Petersburg, Russia	Sixth Meeting of HELCOM PITF (HELCOM PITF 6)
2-3 June 1995 Tallinn, Estonia	21st Meeting of the Chairmen and the Secretariat of the Helsinki Commission (CASH 21)
5-8 June 1995 Riga, Latvia	Third Meeting of the <u>ad hoc</u> Expert Group on Pollution Load to the Baltic Sea (TC POLO 3)
June 1995 HELCOM Secretariat	Organizational meeting for the Project for preparation of the Final Report on Implementation of the Ministerial Declaration 1988
22-24 August 1995 Kristianstad, Sweden	Seminar on "Cost effective methods for waste water treatment"
Before autumn 1995 on research vessels	Four regional ICES/HELCOM Workshops on Quality Assurance and Intercomparison of Benthos Measurement Methods in the Baltic Sea
Autumn 1995	Meeting of the <u>ad hoc</u> Coordination Group (BMP revision)
September 1995	Fourth Meeting of the Working Group on Management Programmes for Coastal Lagoons and Wetlands (HELCOM PITF MLW 4)
10 September 1995	BMCM in conjunction with MEPC 37
12-14 September 1995 HELCOM Secretariat	Joint EC/TC <u>ad hoc</u> meeting to assess the national nutrient programmes to HELCOM 17
13-14 September 1995 Stockholm, Sweden	Meeting of the Working Group on Public Awareness and Environmental Education (HELCOM PITF PA & EE 3)

16-20 September 1995 Warnemünde, Germany	ICES/HELCOM Workshop on Quality Assurance and Intercomparison of Pelagic Biological Measurements in the Baltic Sea and Fourth Training Course in Phytoplankton Identification and Microbiological intercalibration exercise
3-6 October 1995 Copenhagen, Denmark	19th Meeting of the Combatting Committee (CC 19)
9-11 October 1995 Copenhagen, Denmark	21st Meeting of the Maritime Committee (MC 21)
16-20 October 1995 Helsinki, Finland	Sixth Meeting of the Environment Committee (EC 6) and Sixth Meeting of the Technological Committee (TC 6)
22-23 November 1995 Vilnius, Lithuania	Seventh Meeting of HELCOM PITF (HELCOM PITF 7)
27-30 November 1995 HELCOM Secretariat	Third Meeting of the Steering Group for the Coordination of the Third Periodic Assessment (EC BETA 3)
12-14 March 1996 Helsinki, Finland	17th Meeting of the Helsinki Commission (HELCOM 17)
11-13 March 1997 Helsinki, Finland	18th Meeting of the Helsinki Commission (HELCOM 18)